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ABSTRACT

In education, the term restructuring is as notable for its ambiguity as for its meaning. This book draws from more than 600 sources across a wide spectrum of perspectives regarding restructuring. It provides a picture of many of the trends and issues in school restructuring and attempts to place these issues into a context that helps explain where schools have come from and where they might be going. The book is designed to help faculties develop their vision of restructuring and their strategies for pursuing the process of restructuring. The book is organized into four major parts. Part 1, "Rationale and Context," presents a historical context within which restructuring can be considered, as well as a summary of the current motivations for and implications of educational restructuring. Part 2, "Changing Roles and Responsibilities," examines the evolution of new roles for essentially all the groups that participate in public education directly or indirectly. The third part, "Dimensions of Restructuring," explores the concepts of incremental and discontinuous change and then discusses current activities in school restructuring along 12 dimensions--learning standards, curriculum, instruction, assessment, learning environment, technology, school-community relationship, teaching and learning time, governance, teacher and principal leadership, personnel structures, and contractual relationships. Part 4, "Process of Restructuring," captures the lessons being learned about the process of restructuring schools and presents examples of strategies and techniques for restructuring. Two figures and subject and author indices are included. (Contains over 600 references.) (LMI)

Second Edition

ED 409 603

ROADMAP TO RESTRUCTURING

CHARTING THE COURSE OF CHANGE IN AMERICAN EDUCATION

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ROADMAP TO RESTRUCTURING

ROADMAP TO RESTRUCTURING

CHARTING THE COURSE OF CHANGE IN AMERICAN EDUCATION

SECOND EDITION

DAVID T. CONLEY

Foreword by Michael W. Kirst

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In his role as associate professor, he teaches courses on educational policy, school restructuring, teacher leadership, supervision and evaluation of school personnel, school improvement, and educational leadership. He conducts research, publishes, and consults extensively nationally and internationally on these topics. In addition, he has been actively involved in the formulation and implementation of school-reform policy within Oregon.

Before joining the faculty of the University of Oregon, he was a central-office administrator in two Colorado school districts. He was a key figure in school-reform efforts in Colorado in the mid-1980s, where, through his role with the Colorado Department of Education, he implemented the state's teacher-evaluation law and designed and conducted training programs in evaluation and effective instruction. At the University of Colorado, Boulder, he helped develop an innovative teacher-education program and served as the program's first coordinator.

Conley has an extensive background in multicultural education, having served for four years as director or codirector of programs in Colorado and California. He taught junior and senior high school for seven years and served as a building-level administrator at the junior and senior high school levels. He began his career working in public alternative schools.

His work on school restructuring has received national attention through publication by the ERIC Clearinghouse on Educational Management, Eugene, Oregon, and in leading journals for scholars and practitioners. He has produced a variety of research studies on school restructuring, which have been published in various sources and presented at national and international conferences. A complete listing of his publications is available in the ERIC database. He lectures and consults extensively on issues related to educational policy and school restructuring. He has served and currently serves as principal investigator on a number of grants designed to research and implement school reform.

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ACKNOWLEDGMENTS

This project began as an expansion of a fifty-five page monograph (Conley, February 1991) I had written outlining a framework within which to understand the phenomenon of school restructuring. That monograph evolved into the first edition, a full-fledged book on the topic. Had I known this was going to happen, I might have had the sense to be a bit more intimidated by the challenge I faced. And without the support and assistance of the people I acknowledge here, I'm quite certain that this volume would not have emerged in this final form.

Stuart Smith, associate director for publications of the ERIC Clearinghouse on Educational Management, has been key to the continuing development and evolution of this book. His insightful comments and supportive manner have made it much easier for me to examine my work self-critically. His editing makes this a book that is much easier to read and is more clearly organized and conceptually consistent than it would have been otherwise. His suggestions for the organization of part 4 were particularly helpful.

Other staff at the Clearinghouse have also been very helpful. Linda Lumsden has shepherded this edition, helping shape its evolution. LeeAnn August continued to show her mastery of page layout technology. She receives credit for the very readable layout, the cover design, and the production of proofs. I am once again indebted to Phil Piele, director of the Clearinghouse, for his willingness to support a second edition and his consistent encouragement.

Many people offered suggestions and ideas for the first edition, including students in several classes on restructuring at the University of Oregon, who read early versions and offered comments, and my colleague and friend, Jaye Zola. My colleagues at the University of Oregon, Steve Goldschmidt and Paul Goldman, offered a number of helpful suggestions for sections of the first edition as well. Karin Hilgersom helped ensure that the citations and quotations that appear in the first edition were accurate, a particularly challenging task, given my filing system at the time.

FOREWORD

Restructuring in education is widely discussed, criticized, lauded, and confused. It has many potential real and symbolic meanings. But this metaphor has galvanized considerable nationwide activity, and it is one of the most prominent dimensions of education reform. Many educators adapted the restructuring lexicon from U.S. businesses that focused on objectives such as downsizing middle management and eliminating or selling products less integral to their core business. As in many attempts to transfer business concepts to education, much was gained and lost in the translation to public education. Similar movements at the federal level have been termed "reinventing government" by the Clinton Administration.

Someone needed to make sense out of important but misunderstood, diverse restructuring activity. David Conley has done this and provided a great service to the education profession. He chose an extremely broad definition of restructuring, and consequently this book encompasses the widest possible range of restructuring possibilities. Moreover, the context and systemic interactions involved in restructuring are fully described.

The title of a "roadmap" is appropriate because, while the reader is apprised of restructuring vision, strategies, and context, the book does not pass final judgments on what is "good or bad" restructuring. It is too early for this, and the research base does not exist to make definitive judgments.

Since restructuring has so many dimensions and considerations, it is extremely useful to have resources that can assist decision-makers all in one place. Dispersed information is a problem in education, where there are so many sources that span numerous subfields. This book includes twenty-five chapters, and all are necessary to comprehend how many different parts of the education system are involved in restructuring. The book includes several levels of government, curriculum and instruction, personnel, and five chapters concerning different dimensions of process.

But this volume is more than a compilation of sources. It includes judgments, speculation, and wisdom about restructuring. Conley is forthright in presenting "best guesses" after weighing a variety of evidence. As the book unfolds, it becomes clear that the initial concerns about multiple meanings can be overcome as Conley clarifies the means and ends of restructuring.

This second edition is a major overhaul of the final fourteen chapters. Education restructuring is a fast-moving target, so additions and revisions were made from the 1993 first edition to reflect new knowledge and perspectives.

A frequent response to U.S. education problems is a focus upon structure and organization, rather than the technical core of curriculum and teaching. Conley provides a sophisticated analysis of how structural change may be necessary, but he makes it clear that revamping structure alone is insufficient. School restructuring works best when it is focused on teacher capacity and student achievement. Some educators expect that ambitious restructuring such as site-based management, team teaching, and longer class periods will increase pupil attainment. Conley makes clear that these structural changes must be accompanied by other improvement strategies.

In short, at the end of this "roadmap" the reader knows where he has been and where to go. The contents are also a one-stop shopping location for systemic restructuring. The book serves multiple audiences of practitioners, policymakers, and scholars. Once you start down this road, you will want to continue.

Michael W. Kirst
Professor of Education
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INTRODUCTION

I lived briefly in southern Maine, long enough to become familiar with some of the folk tales of New England. One of these stories is of a traveler, hopelessly lost on the back roads of Maine. He stops at the house of an old woodsman who is sitting on his porch and asks directions. The old man begins telling the traveler directions several times, but stops each time midway through and begins again with a different set of directions. Finally, as the traveler becomes more exasperated, the old man strokes his chin thoughtfully and says, "Come to think of it, you can't get there from here."

In many ways school restructuring is an attempt to get "there" from "here." Many states, as well as school districts and individual schools, are pursuing different paths toward the goal of a fundamentally redesigned public educational system. Some paths are proving to be more fruitful than others. What is becoming clear is that there is no one route all schools will follow; there is not one "road" to restructuring. Reports from the field indicate schools and school districts are employing a profusion of strategies and approaches, many of which they identify as restructuring.

This book explores the paths down which states, districts, and schools are traveling. These paths suggest a road map to restructuring, an overall framework of organizational change that results in educational redesign.

PURPOSES AND LIMITATIONS OF THIS BOOK

A tremendous amount has been written about school restructuring during the past half-dozen years. Writers and researchers have investigated, discussed, and debated the need and rationale for change in public education, the various strategies being attempted, their relative effectiveness, and the difficulty of bringing about change in public schools.

This wealth of information has not been easily available to practitioners. It is widely dispersed in journals, papers, and unpublished, hard-to-find documents. When school people begin to consider restructuring, it is not easy for them to assemble the resources that might aid their discussions and decisions.

This book is designed to help address this need, at least in part. It is an attempt to assemble many of the salient works on school restructuring that have appeared in print since discussions on the topic began in earnest in the mid-1980s. But this book goes beyond simply summarizing the writing in this area. Its goal is to provide a conceptual framework within which restructuring activities and processes can be considered; to provoke thinking, discussion, and questions regarding restructuring; and to enable readers to go beyond this text to many other sources that will deepen their understanding of ideas presented here.

The book draws from more than 600 sources across a wide spectrum of perspectives and beliefs regarding restructuring. It incorporates and builds upon several of my earlier works on this topic,* along with information I gleaned from discussions and interviews with practitioners. Additional insights have come from my role as a school-restructuring consultant, as a site facilitator for nine schools participating in a U.S. Department of Education grant designed to enable schools to take the "next step" in restructuring, and more recently as director of a project that works with thirty high schools to develop proficiency-based college admission standards for Oregon's public colleges and universities.

This book provides a picture of many of the trends and issues in school restructuring and attempts to place these issues into a context that helps explain where schools have come from and where they might be going. The book is designed to serve as a tool to help faculties develop their vision of school restructuring and their strategies for pursuing the process of restructuring. It might also be used profitably as a resource for principals, administrators, and boards of education who are trying to understand in greater detail this concept and its implications.

My goal in writing this book is to help educators, community members, and policy-makers understand more clearly why many educators are trying to restructure education, what people may mean when they talk about restructuring, what a few select schools are doing, and how the process of attempting fundamental change in education is being played out. I try to avoid being a cheerleader or cynic. This choice is left to the reader. Rather, I hope that this book will enable the reader to have a more informed opinion on school restructuring, and to be more aware of the causes, issues, techniques, and strategies that are associated with this movement.

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* See, for example: D. Conley (March and September 1991); Conley, Dunlap, and Goldman (1992); Goldman, Dunlap, and Conley (1993).

The scope of the book is both a strength and a weakness. Because it deals with all the activities being labeled as restructuring, along with the process of restructuring, I have had to exclude many important sources. Others may be oversimplified or given inadequate presentation. A reader with a high degree of expertise in one of the dimensions of restructuring might take issue with the conclusions reached about the relative importance of particular techniques or trends within that dimension, or with the omission of a particularly important or significant source.

These reactions would be justified. I have made a series of conscious decisions to trade off depth for breadth in many cases. I hope to have avoided superficial treatment of key issues and to have captured the main or representative points of view for all the dimensions discussed. Although I have limited the depth of investigation of each topic, the reference list will direct the reader to sources that could serve as the foundation for a more thorough investigation of topics of particular personal interest.

Rather than try to write the definitive book on all aspects of educational restructuring, I have designed this book to be an accessible, user-friendly guidebook or "roadmap" to allow the reader to develop a better understanding of restructuring from a "big picture" perspective.

This book also does not attempt to demonstrate or prove the effectiveness of the various techniques being prescribed under the rubric of restructuring. When appropriate, I cite or discuss relevant research as it relates to a particular dimension or activity. However, this is not a review of the research in the formal sense. It is an exploration and systematic analysis of the literature on a number of closely related topics designed to help identify and label the key issues and ideas embedded within the topics being examined.

This is not a book about *school* restructuring alone. It considers changes that are occurring in central offices, boards of education, state departments of education, and the federal role in education. At the same time, much of the information presented about restructuring strategies is focused at the level of the individual school site. The school site, while the nexus for restructuring, does not exist in a vacuum. For that reason, I also consider the school's relationship to other levels of organization that have an impact on its ability to reshape itself.

Is this book about elementary, middle level, or high school restructuring? Is it about urban, suburban, or rural schools? While I offer many examples from secondary schools, much, perhaps most, of what is discussed here applies to all levels of education. For that reason I make no systematic attempt to divide the text into sections addressing different grade levels. While the unique challenges and needs of urban and rural schools are not addressed separately, I do attempt to consider the impact many of these issues have upon these schools. To address these distinctions adequately would require another book. Once again, this book strives to identify common patterns and themes that might have implications for educators regardless of the location of their school.

Finally, two topics are not addressed directly as dimensions of restructuring but may be thought of as overlays to all dimensions. These are multiculturalism and the presence of a caring staff.

The ability of American schools to accommodate and adapt to the increasingly multicultural nature of the student population will ultimately determine the viability of public education and in some important ways the economic and social future of the nation. Although multiculturalism is not included as a separate dimension, I want to stress that this concept will have far-reaching implications for schools.

Decisions made in nearly every area listed among the twelve dimensions of restructuring will be (or should be) influenced by principles of multiculturalism. In that sense it transcends and pervades all the dimensions. Many sections of the book argue for enhanced success for all learners and other manifestations of the concept of equity that implies that all students will be able to succeed in public schools. Underlying these points is the assumption that enhanced student learning for all is unlikely to occur in the absence of a truly multicultural school program and community, one that incorporates and respects the culture, history, beliefs, and values of diverse groups present in the school community and American society.

The other topic that is important but not stated explicitly elsewhere is the notion that effective schools are invariably staffed with competent, caring teachers and other adults who work with children. Let it be noted that almost none of the activities discussed on the coming pages will be possible without highly trained, dedicated, caring people in schools. Let it also be noted that it is not enough simply to hire the best people and let them go their own way. The organizational context must support them. Much of this book is about how the organizational context can support competent, caring staff.

DIFFICULTY OF DESCRIBING RESTRUCTURING

What is it possible to say about restructuring? What is it? How is it interpreted? How many schools are involved in it? How is it being put into practice in schools? No one answer provides an adequate response to these questions, in part because restructuring is a dynamic, evolving concept that means many things to many people. Newmann (1991b) highlights the difficulty of defining this term and suggests some of the term's relative advantages and disadvantages:

> Restructuring joins a lexicon of other memorable slogans in the history of educational reform (e.g., back to basics, community control, effective schools, choice, cultural literacy). Much of a slogan's appeal rests in its capacity to embrace multiple meanings that draw diverse constituencies together in an apparently common cause. While a slogan galvanizes attention and energy, thus offering new possibilities for action, its ambiguity brings the risk that energy will be dissipated in scattered, and even contradictory, directions. The danger here lies not in multiple meanings and approaches, but in the failure to clarify the means and ends of different approaches to "structural" change. (p. 1)

In attempting to describe restructuring, writers face a chicken-and-egg dilemma: Should they use the best evidence available to discern patterns that are fluid and still emerging, knowing that these will be subject to constant revision? Or should they wait until there is an adequate research base that verifies what has occurred and how well it has worked? The second strategy, while of great value, is constrained by the current lack of adequate empirical data from which to draw generalizations that can be substantiated. The first is riskier and more prone to error. It involves making "best guesses" based on reading of the literature, emerging descriptive and case studies, interviews and observations of those who define themselves as being involved in restructuring, and analysis of the actions of policy-makers at all levels. It can have some value in moving forward the discussion and understanding of a concept that has meaning *de facto* for many educators and policy-makers.

This book employs elements of both strategies. The basic outlines of restructuring are relatively clear, what some have called a "new conventional wisdom." Some of the effects of this combination of changes in instruction, curriculum, organizational roles and structures, and power relationships are also being ascertained. However, I do not want the reader to think that every observation offered in the pages that follow can be supported by empirical data. Many are "best guesses" based on a weighing of the evidence from a variety of sources. At the same time, I have made a conscientious effort to ensure that the empirical data that do exist have been referenced where appropriate. I hope that this method of treating the topic of restructuring may serve as a useful contribution to the evolving understanding of this complex, multidimensional phenomenon, and that it might provide some support or assistance both to those considering and those actively engaged in restructuring.

STRUCTURE AND USE OF THE BOOK

The book is organized into four major parts. Part 1, Rationale and Context, presents a historical context within which restructuring can be considered, as well as a summary of the current motivations for and implications of educational restructuring. Part 2, Changing Roles and Responsibilities, examines the evolution of new roles for essentially all the groups that participate in public education directly or indirectly. These first two parts help provide the policy context within which the specific activities of school restructuring that are discussed in part 3 can be better understood. Part 3, Dimensions of Restructuring, explores the concepts of incremental and discontinuous change, then proceeds to an extended discussion of current activities in school restructuring along twelve dimensions. Part 4, Process of Restructuring, captures the lessons being learned about the process of restructuring schools and presents examples of strategies and techniques for restructuring.

I have not designed this book to serve as a cookbook or a "how-to" guide. Quite the contrary. My presupposition is that, for restructuring to succeed, each school must redefine itself individually and allow each teacher, administrator, student, and parent to create a sense of ownership. To help accomplish this, many schools have adapted techniques from strategic planning to develop a *vision* of where they are going. The vision identifies the gap between the school's current practice and an ideal state. Each individual in the school then interprets and translates the vision personally, determining its implications and meaning.

The process of developing a vision—of creating a framework for discussion of the purposes, values, and methods of education—is enhanced when participants can draw upon a wide range of points of view, conduct their own systematic investigations, and learn from the experiences of others who have attempted to implement their vision. The use of such data helps move the process beyond the personal beliefs of each participant to a broader framework within which personal perspectives can be weighed and analyzed. As I mentioned previously, some common elements are beginning to appear in many of the visions for education's future.

This book can be used in a variety of ways to facilitate the process of restructuring. It can be divided into sections, with different individuals given the responsibility to read and summarize the key points in each section and identify their implications for the school; or a group may choose to focus upon one section and have all members read and discuss the section. Similarly, a team might analyze a section, identify the key sources cited in that section, and then find and reproduce them for the faculty or committee charged with investigating restructuring options. A related technique involves assigning source articles to each faculty or committee member and having them prepare a written abstract of the key points in the article. These abstracts might then be copied and assembled in notebook form to allow others easier, quicker access to the literature base on the topic being investigated.

The structure of this book also lends itself to use as a resource book for workshops or courses on restructuring and change in education. Many of the activities described in the previous paragraph might also be used in such settings.

I have also written a companion volume that can help prepare schools for change. It is entitled *Are You Ready to Restructure?* Its content parallels much of what is in this book, but is written in a nontechnical, conversational style. Its twelve chapters can be assigned to a team considering school change. The book does not contain the citations and quotations from sources found in this volume. Each chapter concludes with a series of discussion questions to help the team determine its attitudes toward what has been presented. The goal of the book is to increase readiness for change, or to allow a school to determine it may not be ready, if that is the case. It serves as a necessary and valuable prerequisite to considering the types of specific changes presented in this book.

No matter how this book is employed, its purpose is to provide the reader with the broadest possible overview of this complex, multidimensional topic, and to structure the presentation of information on this topic in a manner that triggers the generation of ideas and the identification by the reader of possible problems and potential solutions. The goal is a better-informed reader who is able to make more sophisticated analyses and reach more thoughtful conclusions on this topic of critical importance to the future of education.

WHAT IS RESTRUCTURING?

In education, the term *restructuring* is as notable for its ambiguity as for its meaning. In the private sector the term has come to mean a process of rapid adaptation prompted by the need to maintain or regain competitiveness. The restructuring process has been called a "radical reaction to product or market changes" (Enderwick 1989, pp. 44-45). Employment and work-assignment patterns within a company are usually disrupted by this process, and layoffs frequently occur as a result. This is not the meaning for this term as educators apply it to change in schools.

In fact, educators often do not distinguish very carefully among possible conceptions of change. It is useful to distinguish among three levels of change occurring sometimes simultaneously in public schools: renewal, reform, and restructuring, what might be referred to as the "three R's" of change in education. This differentiation can be important, particularly given the fact that almost every school at some point embarks on a change effort of some sort, and that most attempts to change are serious events in the life of schools.

Renewal activities are those that help the organization to do better and/or more efficiently that which it is already doing. Most school-improvement projects fall into this category, as do many of the staff development programs districts offer. Faculties can easily assume that if they are undertaking a number of important renewal activities they are "restructuring," since these activities take a great deal of energy and are capable of yielding positive results. This type of approach, however, does not cause educators to examine any of their fundamental assumptions or practices, except by implication. For many schools, renewal may be the most appropriate way to proceed. For others, renewal efforts cloaked as restructuring will lead to frustration because the school will not improve nearly as much as is necessary given its current state of functioning, but a great deal of energy will be expended in the process.

Education has a well-documented tradition of improvement efforts that characterize the renewal mindset of change. The pace of systematic improvement has quickened over the past two decades as a research base and models of improvement have been developed (Clarke 1984, Cohen 1982, Edmonds 1982, Joyce 1991, Mortimore and Sammons 1987, Purkey and Smith 1983, Purkey and Degen 1985, Stedman 1987, Vickery 1990). More and more states are requiring systematic school improvement. This increased knowledge base and more prescriptive policy framework may set the stage for schools to attempt more fundamental change. Many models of school improvement help teach educators the skills of data collection and analysis necessary for developing a profile of current practices and identifying areas in need of improvement (Blum and Butler 1985), of determining key shared values and goals (Cook 1988), and of developing the sense of collegiality that allows teachers to talk with one another about practices in their schools (Little 1982). These skills can be important in terms of creating an internal capacity to manage change within the school. Indeed, the existence of this capacity can enable schools to consider change of a more fundamental nature (D. Conley, March 1991; Goldman, Dunlap, and Conley 1993).

Reform-driven activities are those that alter existing procedures, rules, and requirements to enable the organization to adapt the way it *functions to new circumstances or requirements.* Two important points help to identify and define reform-oriented efforts: First, changes center on procedural elements, the policies and procedures that determine the basic "rules of the game" for all participants in the system; and, second, the impetus for reform almost always comes from some external force, such as a board of education, a state department of education, or even educational reformers. This external impetus generates internal actions, such as the appointment of committees to examine how current practice would need to be changed to bring the school into compliance with the new expectations or requirements.

Clearly, reform-oriented change cannot be overlooked. In many cases an external "jolt" may be required to jump-start change in schools that are particularly complacent, self-satisfied, or dysfunctional. At the same time, such activities are more likely to produce a new set of rules or procedures than an examination of fundamental practices or assumptions about schooling. Some legislatively mandated programs do have effects on schools, causing them at the very least to talk about current practice. However, many externally originated programs of change for schools do not seem to be very successful, in part because teachers are less likely to develop ownership of the program, or to adapt it to their needs (Berman and McLaughlin 1974, Fullan and Pomfret 1977, Fullan and Stiegelbauer 1991, Goldman and Smith 1991). As in the case of renewal activities, schools can devote a great deal of energy to reform-based improvements and never realize that they have not engaged in a consideration of issues related to restructuring the educational environment.

Restructuring activities change fundamental assumptions, practices, and relationships, both within the organization and between the organization and the outside world, in ways that lead to improved and varied student-learning outcomes for essentially all students. The important elements of this definition are the idea that fundamental assumptions must be challenged for change to occur and the emphasis on student learning as the key variable being addressed. *Learning* here refers to performance standards identified and defined by the state, district, and/or school site. The conception of learning contained in the terms *improved* and *varied* is different from that held today by many students, teachers, administrators, parents, and policy-makers. It implies not just short-term memorization of material, but the ability to retain, synthesize, and apply conceptually complex information in meaningful ways, particularly as such application demonstrates understanding of challenging content, intricate concepts and systems, sophisticated learning strategies, real-world problems, and natural phenomena.

The definition highlights the need to consider a variety of levels and ways of learning and to examine all current assumptions, practices, and relationships in the light of a single overarching goal: enhancing students' learning. It also draws attention to the needs of *all* students attending school, not just those students who are currently succeeding.

Far too often, the emphasis on improved student learning becomes obscured when schools define restructuring as changes that focus on or result in enhanced working conditions for adults. While the needs of adults should not be overlooked, anyone engaged in educational redesign or improvement should remember that any change that fails to result in improved student learning doesn't ultimately affect the fundamental purpose of schooling. Clearly, many dimensions of life in schools have an equal impact on the students and adults in the school, and improvements can often be designed to benefit both. Such opportunities can and should be pursued productively and vigorously. However, many of the ideas for school restructuring being considered currently are unlikely to have much impact on the lives of students unless they are explicitly linked with other activities more closely related to student learning.

Many educators have used the general idea of restructuring as a way to create the appearance of change without necessarily confronting the harsh realities that fundamental organizational redesign suggests. These educators seem to say: "I'm all for change—as long as I don't have to do anything differently." This unwillingness to look at underlying assumptions, values, beliefs, practices, and relationships can prevent schools from coming to grips with the profound and disturbing implications of true restructuring.

It seems likely that any district or school that adopts the definition of restructuring presented earlier would find itself in the position of examining almost all its practices. For most schools such self-examination is too difficult and threatening. Fullan (1991) makes this point: "The incentive system of public schools with abstract and unclear goals, lack of performance scrutiny, and a noncompetitive market makes it more profitable politically and bureaucratically to 'innovate' without risking the costs of real change" (p. 28).

Schools should not feel so alone in this respect. In the corporate world as well, companies rarely look very closely at themselves in the absence of some external challenge or threat, which precipitates an internal crisis. The more clear and pressing the threat is, the more fundamental the examination, and the more drastic the response is likely to be. Without the presence of a strong external pressure, schools are going to have a very difficult time remaking themselves voluntarily, particularly when such a process could involve dislocation, reassignment, and retraining for numerous members of the organization, and is almost assured of engendering community concern in nearly all cases, and active opposition in at least some cases.

THINKING ABOUT CHANGE

Large organizations have a difficult time adapting rapidly. This is true whether we speak of schools or companies. I find it helpful to think of change along a continuum, one that considers the gap between the organization's current state of functioning and conditions in its external environment. If the discrepancy is small, the organization can change slowly and in steps. If the gap is large, a complete overhaul may be called for if the organization is to survive. At one end, the organization is very much in control of the goals and processes of change; at the other, it is not. In this conception of change, the key distinction is the rapidity and magnitude of change the organization faces to realign itself with the demands of a swiftly changing or evolving external environment.

Meyer, Brooks, and Goes (1990) analyzed the strategies organizations employ when confronted by rapid change, or "environmental jolts." They differentiate between *continuous*, or first-order change, and *discontinuous*, or second-order change:

> Almost everyone who spends much time thinking about change processes seems to conclude that the world changes in two fundamentally different modes (Watzlawick, Weakland, and Fisch, 1974). Continuous, or first-order change, occurs within a stable system that itself remains unchanged. Indeed system stability often *requires* frequent first-order change, such as the myriad of small compensatory steering movements that permit a bicyclist to maintain his or her equilibrium. Discontinuous, or second-order change transforms fundamental properties or states of the system. The distinction between first- and second-order change has been likened to that between simple motion and acceleration (Watzlawick et al., 1974). Some compelling examples of social systems plunging from first-order to second-order change are afforded by the sociopolitical upheavals in eastern Europe in late 1989. (p. 94)

Meyer, Brooks, and Goes (1990) state that "as the pace of technological, socioeconomic and regulatory change accelerates, organizations' survival depends increasingly on devising entrepreneurial responses to unforeseen discontinuities" (p. 93).

Meyer and colleagues then offer a conceptual framework for understanding how these changes occur and the responses at individual work sites and at the industry level. They identify four reactive strategies:

1. *Adaptation*: Incremental change within an individual organization
2. *Evolution*: Incremental change within an established industry
3. *Metamorphosis*: Frame-breaking change within an individual organization
4. *Revolution*: Emergence, transformation, and decline of entire industries

They conclude that there is no guarantee organizations will choose a successful or appropriate change strategy. In the late 1970s and early 1980s, San Francisco Bay Area hospitals pursued various strategies in response to decreasing regulation and increasing pressures for cost containment—a pattern of discontinuous change. Historically, protected organizations such as hospitals have had a difficult time responding to second-order change, in part because managers are unprepared for it:

> Discontinuous change is enigmatic and paradoxical for managers caught up in it. It breaks the frame in which they have been operating, a frame which they probably have come to take for granted. The events triggering discontinuous changes can appear so inconsequential, and the onset can be so sudden, that managers often are forced to act before they understand of (sic) the consequences of acting. When turbulence subsides a new equilibrium may be achieved that is partly a product of those actions. In this sense, managers in the throes of revolutionary change assume the role of entrepreneurs reinventing both their organizations and their environments. (p. 108)

Educators find themselves in a similar situation. They may well be on the verge of being confronted with sudden, unpredictable jolts, whose significance will be difficult to discern; small, adaptive responses of the type that are associated with school improvement may be disastrous. Whether, or to what degree, educators can assume the role of entrepreneur to reinvent their organizations and environments may be the key unanswered question upon which the fate of the restructuring movement, and perhaps public education in the twenty-first century, hinges.

Cuban (1988), like Meyers and others, uses the same terms to describe the intensity of change: *first-order* and *second-order*. First-order changes improve the efficiency and effectiveness of what is being done already "without disturbing the basic organizational features, without substantially altering the way that children and adults perform their roles" (p. 342). Second-order changes "alter the fundamental ways in which organizations are put together, including new goals, structures, and roles" (Fullan 1991, p. 29). Educators have been largely unable to implement second-order change successfully in schools. The difficulty of this type of change should not be underestimated. A more detailed discussion of the problems and challenges associated with fundamental

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change in education will be presented in part 4, Process of Restructuring.

Renewal and reform can be thought of as incremental forms of change in most situations and manifestations. They do not disturb organizational features substantially, nor do they necessarily alter the ways adults perform their roles. Restructuring, on the other hand, implies second-order change. However, as will be considered later, many schools that claim to be restructuring appear reluctant in practice to engage in second-order change. They may develop documents replete with the language of such change, but an examination of the nature of their workplace often leads an observer to conclude that little in practice is different, and that those differences that do exist would better be categorized as first-order, rather than second-order, changes. The reader is encouraged to analyze changes occurring in her or his organization and consider whether (or to what degree) they are renewal, reform, or restructuring, and to what degree the organization is conceiving of change as entailing first-order versus second-order alterations of practice and structure.

On a deeper level, the reader must come to grips with her or his organization's basic capacity to change. How capable of change is the organization, even if its existence is threatened? Not all organizations respond successfully even to threats to their survival. The last thirty years of economic transformation in the United States bear witness to this phenomenon, as many companies that were household words no longer exist.

PART 1

RATIONALE AND CONTEXT

INTRODUCTION TO PART 1

The educational-restructuring movement has sprung up and developed with such rapidity that it is difficult to place it into a context. Is it old wine in new wineskins? Is it merely another fad? Who wants it? When is educational change renewal, when is it restructuring? What is restructuring, anyway? Is it a movement at all? What is its future?

The term *restructuring* means many things to different people. The fuzziness about what constitutes restructuring has been, perhaps, one of its more appealing elements: almost anything qualifies. The term continues to be used to describe many different changes occurring in the structure, methods, and content of public schooling. Restructuring will continue to be difficult to define as long as it lacks a clearly identifiable focal point. Unless this focus becomes defined, it will be difficult to put restructuring into context, both as a change strategy and as a historical phenomenon.

Chapter 1, Historical Background, explores the relationship between contemporary restructuring and earlier attempts at large-scale reform of education. Chapter 2, The Whys of Educational Restructuring, summarizes some of the reasons presented to justify large-scale change in public schools. Finally, chapter 3, Creating New Assumptions About Schools, Schooling, and Students, explores some of the values that are embedded in the goals of educational restructuring.

CHAPTER 1

HISTORICAL BACKGROUND

Many people involved in restructuring have heard skeptics utter phrases such as "I know I've been in the business a long time when I see the same ideas coming around for the second and third time," or "Here we go again," or "The more things change, the more they stay the same." The type of on-again, off-again approach to innovation that has characterized American education over the past thirty years has helped give rise to these attitudes. Educators who express them are not without some justification in being wary of committing their precious time and energy to a new program or approach when few have been sustained successfully during their careers.

However, this skepticism also masks the idea that if educators try a particular innovation once, they should either incorporate it into educational practice for all time or abandon it categorically. In reality, an educational innovation may come and go, not necessarily or solely because of its relative effectiveness, but at least in part because of the context into which the innovation is introduced. If it is a good match with the politics, culture, and economics of the school, district, or state, it has a greatly enhanced probability of becoming institutionalized. As the context changes, today's failure becomes tomorrow's success, and vice-versa.

This chapter explores the historical context of school restructuring over the past century. It also traces the values and goals that have driven change in public education at various times and explains how these shifting goals have led to periodic efforts to reshape schools. This brief treatment is not meant to serve as a substitute for a careful reading of the history of education generally or of educational reform specifically. Authors such as Tyack (1974), Cremin (1988), Cuban (1984a), and Callahan (1962) have chronicled these events in much greater depth and detail. My goal is to provide some perspective on current efforts to restructure schools, since the restructuring movement seems to lack a historical perspective.

Those engaged in efforts to redesign schooling generally possess little awareness that significant change has occurred at other periods, or that there is much to be learned from previous attempts to solve educational problems. Few of the spokespeople for today's reforms have identified the link restructuring seems to have with the Progressive school of thought in education, for example. And few analyses note how similar the concerns emanating from the business community today are to those voiced by the private sector nearly one hundred years ago.

Similarly, few of those who advocate basing curriculum and instruction on the needs of students acknowledge the link their thinking has with other reformers from previous eras. They do not seem to be aware that many of the changes they promote as original and even radical have already been examined by researchers, have been put into practice on a large scale, and have been found to improve student learning. One of the best examples is the Eight Year Study, which examined the success that students from "progressive" public schools of the 1930s had when they subsequently entered college. It demonstrated very clearly and powerfully the effectiveness of many techniques advocated by today's reformers. Ralph Tyler (1986/1987), the director of the study, describes several of its most significant outcomes:

> The Progressive Education Association developed the Eight Year Study in which 30 schools and school systems from Boston to Los Angeles demonstrated the effectiveness of curriculums designed by each school to meet the needs of its own students....
>
> Perhaps [the] most significant [outcome of the study] in terms of current practices in curriculum development was the widespread acceptance of the idea that schools could develop educational programs that would interest a large proportion of their students, help to meet some of the students' needs and, at the same time, provide students with the preparation essential for success in college. Because of that project, most state departments of education and most colleges and universities greatly reduced their specific requirements for the high school curriculum and relied more upon each school's taking responsibility—although recent trends have been in the opposite direction.
>
> A second outcome of the study was the recognition by colleges and universities that they could find among high school graduates who had not met specific subject requirements many who would succeed in college work. They learned that they could select successful candidates for admission on the basis of their ability to read, write, solve quantitative problems, and show evidence of strong interest in further education. This led to the wider use of entrance examinations, such as the SAT, that did not test specific content but appraised general skills....
>
> ... [An addtional] outcome was the wide acceptance of educational evaluation instead of testing.... The Eight Year Study... demonstrated that

> it was possible to appraise the progress of students toward [achievement of course objectives] by using questionnaires, observations, and samples of products as well as tests. (p. 38)

Tyler's work on the Eight Year Study is just one example of the lessons that have been learned regarding educational practice, lessons that appear not to be acknowledged in many conversations about and programs of restructuring. The brief discussion of selected historical events that follows serves only to illustrate this point by suggesting other parallels that might be drawn between previous attempts at fundamental change in education and what is occurring now.

EDUCATIONAL RESTRUCTURING IN THE 1890S

Change in public education is nothing new. However, observing change in education can be difficult, since events unfold from year to year. The process may be likened to a time-lapse sequence of a flower opening: as each frame is recorded, little change is noted; but when the clip is played back, the flower is observed to burst forth into glorious bloom on a moment's notice. In fact, the educational system has been evolving since the arrival of the Pilgrims. What has been difficult to discern are the occasions when education has undergone fundamental change in relatively short periods. For example, during the period from the early 1890s through roughly 1920, changes of virtually unimaginable proportion washed over the system with regularity. These changes shaped the system that exists to the present.

The combined forces of urbanization, industrialization, and immigration put tremendous pressure on education during this period. High school enrollments increased twenty-fold from 1875 to 1900 as the right to finance public education through broad tax support was established (*Stuart and others v. School District No. 1 of Kalamazoo* 1874). The legitimization of public funding enabled schools to develop new programs and serve more students.

And more students there were. The tidal wave of immigration peaked at roughly eight million in the 1890s and continued during the next two decades. This influx created pressure for standardization of an educational system that had truly been community controlled and decentralized. While educators took the lead in designing and implementing the reforms of the era, they were clearly influenced by the values, philosophies, and techniques prevalent in the private sector. In addition, higher education exerted a powerful influence in the direction of standardizing educational practice. It was during this period that grade-level organization, the Carnegie unit, the notion of intelligence and of IQ tests, the use of standardized achievement tests, the content and structure of the high school curriculum, the junior high school, and the professional superintendent and principal, among other major reforms, were implemented.

The notion that the purpose of an education was to prepare youth for the labor force in addition to attaining the traditional goals of the liberal-arts curriculum also gained respectability and credence. High schools were to be *comprehensive* institutions; they would educate *all* the youth, though in different ways and toward different ends. Previously public education had been viewed primarily as a way to enable students to read the Bible, as a form of socialization necessary in a democratic society, and as a vehicle for the transmission of local community values. A grade school education was generally sufficient to serve these purposes.

It was around this same period that the Progressive movement in American education was born. Although the roots of Progressivism can be traced back at least to Rousseau, it was John Dewey who did more than any other individual to give voice to the thinking of the Progressive movement and bring it into the public eye.

The Progressives believed not only in the involvement of the learner in the construction of knowledge through structured experience, but in the use of public education as a tool for social reform (Sewall 1983). Public education came to be seen as the means by which classes of students who would otherwise have little hope of advancing themselves might improve their lot in life in comparison with their parents.

The last state to pass a compulsory school attendance law, Mississippi, did so in 1918. At the same time, many other states were increasing the minimum "leaving age," thereby increasing the number of students going on to higher grades and the challenges associated with instructing them. Public education was to be the key for new immigrants and other city dwellers to establish the foothold that would allow them to climb the social and economic ladder.

Two forces, the Progressive educators and the business community, while not necessarily in agreement on the general goals of school restructuring, ended up being able to advocate or support many reforms that blended together in practice. Progressives favored reform to humanize education and use it as a tool for social reform and economic opportunity for the less advantaged. The business community supported fundamental change in education designed to prepare young people to enter the labor force with the proper attitudes and habits necessary for factory work. For very different reasons, these two groups, one internal to the educational community and the other external to it, supported a series of reforms that served to rationalize and systematize public education and strengthen its links to the economic system. Neither necessarily saw the other as an ally; however, they combined to increase the pressure for systemic educational reform at just the time when the system was most vulnerable to change.

It is clear, based on Callahan's (1962) interpretation, that the business community was clearly the more powerful of the two forces. However, it is worth remembering today that strong voices advocating change from both within and outside the educational community had powerful effects, even if their messages were not always the same, in large measure because social, political, economic, demographic, and even technological forces all converged on the educational system more or less simultaneously to create an almost irresistible tide of change in education.

EDUCATIONAL RESTRUCTURING IN THE 1990S

How do the events of the past century and those from earlier in this century help us understand the forces that favor fundamental change in education today? Once again, two distinctly different groups, for very different reasons, are advocating radical transformation of public education. On the one hand, educational reformers such as Theodore Sizer and John Goodlad promote changes that can be viewed as consistent with the Progressive tradition of education. These reformers emphasize active construction of knowledge by students, demonstration of skills through exhibitions rather than tests, allocation of time based on the needs of the learner rather than on the needs of the school schedule, and alteration of the student-teacher relationship to student-as-worker, teacher-as-coach.

A teacher in a school that is a member of Sizer's Coalition of Essential Schools describes this change in emphasis:

> Since I've moved to this school, my teaching has really changed. I used to feel as if I were the quarterback in the classroom. I carried the ball and made touchdowns with my best lectures. Somewhere along the line, I realized that I was doing all the work. Now I stand off to the side, and the kids do the running. (Wasley 1991, p. 35)

The influence of present-day educational reformers should not be underestimated. They are highly visible within the educational community; their articles appear in journals that practitioners read; and they speak regularly at large educational conferences and conventions. They also have had the ear of many state legislators who have significant power to implement educational reform.

At the same time, a possibly stronger force for change has emerged—the business community. As business has been forced to redesign the traditional factory model in the face of a rapidly evolving world economy, its needs for workers have changed. It is clear that the American economic system has been remaking itself over the past decade to adapt quickly to its changing place in the international economic system, from Goliath to partner. The United States will likely never again dominate the world economy as it did in the period immediately following World War II. Its new role is still being defined (Reich 1988 and 1990). Business is viewing a well-educated work force as more important than ever before to its success. The public school system continues to be seen, at least for the time being, as a critical partner in the eventual success and profitability of American business.

Another way to compare and contrast restructuring is to examine the high school, which was a focal point for fundamental change at the turn of the century and appears to be in such a position once again. The next section takes a closer look at this process.

THE EVOLUTION OF THE AMERICAN HIGH SCHOOL

One clear trend in the restructuring movement is that high schools appear to be quite difficult to change, and at the same time appear to be the level of education more in need of change than any other. At the turn of the twentieth century, the high school adopted the factory model of organization, with its reliance on standardization, efficiency, task specialization, and batch processing, more completely than any other level of education. Ironically, the high school's success in adapting to the last wave of systemic change has made it the level facing the greatest challenge today. The high school also finds itself being the institution where the largest proportion of children fail. A high dropout rate has been acceptable until now for a variety of reasons. However, as will be argued later, it may no longer be acceptable for one of every four or five students to leave school without a diploma. The pressure on high schools to change radically and fundamentally continues to increase.

Why is the high school under such pressure to change? A brief examination of its evolution will help put into perspective its philosophical assumptions and historical role.

The intellectual roots of the American high school can be traced back at least to the 1700s and the Renaissance, and, for some elements, to the ancient Greeks. The study of knowledge organized by time-honored disciplines still is present in high schools in slightly altered form and comprises the intellectual core of the high school. History, science, mathematics, English, and, to a certain extent, foreign languages (formerly Latin) are still identified as the "core" subjects in nearly every high school in America.

In the late 1700s and early 1800s, these were the topics of interest to a landed aristocracy and, more importantly, members of a newly emerging business class. Reese (1995) points out that many public high schools did undergo a transition from the "classic" curriculum (Latin, Greek, philosophy, the Classics) to an adaptation of the "English" curriculum (modern languages, history, geography, science, advanced mathematics, and English literature) and that public high schools emphasized both preparation for work and college (pp. 91-93). However, even this transition created an "academic" core that has been passed down with relatively few changes to the present. What was labeled "preparation for business" in the 1800s passes for preparation for college in today's high school.

In the 1890s, enrollments increased sharply as schools became the primary means to socialize immigrant children, public taxes were used to fund universal education, and new laws held young people out of the work force. Only then did the role of the secondary school come under examination.

Although high schools had also prepared students for opportunities in the burgeoning mercantile economy that was developing on the Eastern seaboard throughout the 1800s, there was little consistency to the programs offered for preparation in business. The universities, however, did have relatively clear expectations for students. They were, then as now, a powerful influence on the high school program.

Beginning in the 1890s, the colleges launched a series of reforms designed to (1) make high school programs more uniform through the use of common course titles; (2) enforce some form of quality control through the imposition of the Carnegie unit*, which set standards for the amount of credit to be granted based on the amount of "seat time" in a course; (3) admit students on merit and achievement, not just religious background, parental ability to pay, or other extraneous measures, which resulted in the creation of The College Entrance Examination Board (now the College Board) and knowledge-based entrance examinations; and (4) standardize grading procedures through the use of gradepoint averages and official transcripts. The recommendations of the Committee of Ten, convened in 1892, resulted in a much closer alignment between high schools and colleges and a standardization of the high school curriculum around an academic "core."

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* The leader in this movement was the Carnegie Foundation for the Advancement of Teaching, which offered a pension plan (today known as TIAA-CREF) for professors, who had few retirement benefits. High school teachers were not allowed to participate in the program unless their high school agreed to measure its courses in year-length "Carnegie units."

By 1911, pressures for the high school to change were increasing rapidly. That was the year the committee on the articulation of high school and college submitted its report to the National Education Association. A direct outgrowth of that report was the appointment by the NEA of the Commission on the Reorganization of Secondary Education, which went on to develop the Cardinal Principles of Secondary Education. An excerpt from the commission's report provides insight into the perceived need for change in public education:

> Secondary education should be determined by the needs of the society to be served, the character of the individuals to be educated, and the knowledge of educational theory and practice available. These factors are by no means static. Society is always in process of development; the character of the secondary-school population undergoes modification; and the sciences on which educational theory and practice depend constantly furnish new information.... Failure to make adjustments when the need arises leads to the necessity for extensive reorganization at irregular intervals. The evidence is strong that such a comprehensive reorganization of secondary education is imperative at the present time.
>
> 1. *Changes in society*—Within the past few decades changes have taken place in American life profoundly affecting the activities of the individual. As a citizen, he must to a greater extent and in a more direct way cope with problems of community life, State and National Governments, and international relationships. As a worker, he must adjust himself to a more complex economic order. As a relatively independent personality, he has more leisure....
>
>   The responsibility of the secondary school is still further increased because many social agencies other than the school afford less stimulus for education than heretofore.... In connection with home and family life have frequently come lessened responsibility on the part of the children; the withdrawal of the father and sometimes the mother from home occupations to the factory or store; and increased urbanization, resulting in less unified family life. Similarly, many important changes have taken place in community life, in the church, in the State, and in other institutions. These changes in American life call for extensive modifications in secondary education....
>
> 3. *Changes in educational theory*—The sciences on which educational theory depends have within recent years made significant contributions. In particular, educational psychology emphasizes the following factors:
>
>   a) *Individual differences in capacities and aptitudes among secondary-school pupils....*

> *b) The reexamination and reinterpretation of subject values and the teaching methods with reference to "general discipline"....*
>
> *c) Importance of applying knowledge....*
>
> *d) Continuity in the development of children....*
>
> The foregoing changes in society, in the character of the secondary school population, and in educational theory, together with many other considerations, call for extensive modifications of secondary education. Such modifications have already begun in part. The present need is for the formulation of a comprehensive program of reorganization, and its adoption, with suitable adjustments, in all the secondary schools in the Nation. Hence it is appropriate for a representative body like the National Education Association to outline such a program. This is the task entrusted by that association to the Commission on the Reorganization of Secondary Education. (Commission on the Reorganization of Secondary Education 1928)

The commission recommended changes that began moving the high school toward meeting the needs of a much broader range of students. It recommended the inclusion of vocational courses, the provision of guidance for students, and attention to the education of the "whole child" through subjects such as health, ethics, the worthy use of leisure time, and citizenship. The high school had now moved from one central mission, college preparation, to three: college prep, vocational education, and general education.

The proportion of students completing high school increased steadily over the next fifty years, so that by 1953 half of all American youths were graduating. The high school struggled to provide a meaningful education for all of them. This massive increase in graduation was accomplished at least in part by an expansion of the general education track—less challenging, less focused courses that were designed primarily for those not necessarily going on to college nor preparing for a profession.

The Russians changed this in 1957 with the launching of Sputnik. Alarm bells sounded, particularly in Congress. A series of federal programs were legislated to improve the quality of American education, but with particular emphasis on math and science. James Conant, president of Harvard University, undertook a two-year study of the American high school. His report (Conant 1959) became "the most authoritative design for secondary education in the postwar era" (Sewall 1983). The report basically harkened back to the recommendations of turn-of-the-century university presidents, emphasizing traditional academics for nearly all students, minimum requirements in "core" subjects, and use of ability grouping with particular attention to the academically gifted.

These recommendations helped lead to the creation of a new track in high schools—the "Advanced Placement" track, initiated in 1956 and rapidly implemented in the late fifties and early sixties (Powell 1993). Now there was the college-bound student and the "truly college-bound."

In the sixties issues of equity began to receive greater attention in response to the civil-rights movement and the school-desegregation process. The high school was under pressure to produce more world-class scientists to compete with the Russians; at the same time, it was expected to educate the less privileged to higher levels so that they might participate in the American Dream. The result was the gradual development of the "at-risk" track, which encompassed a broad array of strategies, including special tracks, alternative schools, and programs within high schools. This made five separate tracks, each with its own curriculum.

The passage of the Education for All Handicapped Children Act (P.L. 94-142) in 1975 led to the creation of the most recent track, special education. Consisting of a bewildering array of acronyms, these programs function within and independently from the high school, sometimes overlapping the at-risk track, often not. Their relationship with the rest of the high school program is problematic at best in most schools, particularly in regard to determining the level of academic achievement special students must attain to earn a diploma. Special education, although often more like a school-within-a-school than another track, can be thought of as the sixth track in the high school.

What emerges is a picture of the high school in the 1990s as an institution that has struggled to adapt during the past hundred years through the sequential introduction of additional tracks to address both equity and excellence goals while accommodating an increasingly diverse student body. Its core, however, is still firmly rooted in intellectual traditions from a time when mass education was not the established practice. This heritage of adaptation creates a constant tension within high schools since some elements of the curriculum are deemed more "legitimate" than others. The tradition of a liberal-arts education as "discipline for the mind" confronts a school population that is not motivated to pursue activities simply as "disciplines" or mental exercises. Thus the debate over the role of a liberal education (Bloom 1987, Hirsch and others 1987) overlooks reality; if students are not and cannot be motivated to participate in this model, it matters little what ultimate virtues the model possesses in theory. If society wants all students to become educated to some relatively high level of intellectual functioning, a classical liberal education may not present the most promising foundation if it cannot be adapted to reflect the much broader and differentially motivated student population it is now expected to serve.

This is not the same thing as saying there is no place in high schools for the best elements of liberal education; rather, as will be explored throughout the remainder of this book, new models are emerging that consider a variety of intellectual approaches and instructional strategies to be more or less equal and permit students to follow a variety of paths to meet common standards. This flexibility allows the transmission of a wider range of knowledge in a manner that helps more students to achieve higher degrees of success.

One effect of the restructuring movement has been to stimulate discussion of the role and purpose of high schools, particularly their ability to educate nearly all students to some relatively high level of functioning. It seems clear that the high school must be considered the new "common school," the level of education that all children are expected to attain. This level of common education has risen consistently throughout the history of the country, from a primary education in the 1700s, to an upper-elementary education by the late 1800s, to a junior high school education by the late 1930s. In the postwar era, the expectation that nearly all students would obtain a high school education developed rapidly; this expectation is becoming firmly institutionalized in the postindustrial society of the 1990s. From this perspective, changes that must occur in high schools will need to be more fundamental than those in middle and elementary schools, though those levels face serious challenges as well.

A FUNDAMENTAL DIFFERENCE

It is worth noting that many of the ideas being considered for restructuring in the 1990s were most recently attempted in the late sixties and early seventies. Innovations such as flexible scheduling, team teaching, integrated curriculum, individualized education, schools within schools, and many others were common twenty years ago. Many teachers who are old enough to remember this say, "Here we go again," when they hear discussion of these ideas.

There is at least one major difference in the way these innovations might affect schools now versus then. In the sixties and seventies, various advocates for social change were attempting to use schools as a vehicle to remake society. Many of the people who entered teaching at this time agreed with the notion that schools could be vehicles for social change. The average age of teachers was much younger then, as school officials engaged in several years of frantic hiring to keep pace with the arrival of the baby boom in schools. This younger, perhaps more idealistic, teaching staff tended to make more of a connection between education and issues of social justice. They tended to believe that schools could promote the ideals of democratic participation and individual self-worth that the civil-rights movement and the "counterculture" represented. These were times when freedom was emphasized and accountability downplayed.

The business community (and many, perhaps most, parents) never truly supported the type of changes that were occurring in schools. In addition to lack of fundamental support, there was lax accountability to determine if these reforms produced tangible improvement in student learning. By the late seventies, a more general repudiation of the idealism of the sixties helped contribute to a swing of the pendulum in the other direction, and the "back to basics" movement emerged.

The situation in the 1990s is quite different in many respects. It is the business community that is leading the call for basic reforms in education and the educators who, in many cases, are resisting. The roles have reversed. Rather than educators attempting to change school in order to change society, it is society (in the form of business and government) that is attempting to change schools. Teachers are the ones advising caution and urging that the pace of change be more deliberate. The teaching profession is now older, more experienced, and perhaps more cautious or wary (some might say cynical) in responding to calls for fundamental reform than it was two decades ago when the last wave of massive experimentation took place. Many from the current generation not only saw those reforms (and what became of them), but have subsequently spent the better part of their lives in public schools. It is difficult for adults at midcareer to be convinced that all they have done throughout their careers might have been wrong or ineffective.

Parents have once again been left on the sidelines by policy-makers and educators. The result has been opposition to restructuring based on both real and imagined concerns. In essence, parents have not been convinced of the need for change. Parents tend to be dissatisfied with education in the abstract and satisfied with it in the concrete; they generally rank their local schools highly, but do not rank the educational system nearly as highly (Elam, Rose, and Gallup 1994, Elam and Rose 1995).

The emphasis in the call for school restructuring is not primarily a social goal such as enhanced equity; rather, it is economic and societal survival. The emphasis is not on freedom, but on accountability. Restructuring, in this context, represents a reordering of society's priorities for education. Because many educators are not enthusiastic about this reordering of priorities and some parents are concerned about change in education generally, educational restructuring is likely to follow a course of fits and starts. However, the forces for change remain as strong as ever in the environment that surrounds schools. Some schools have begun adapting, but the most powerful and sustained calls for change in education will likely come from outside the education profession, at least in the immediate future.

One other important difference between the current era of reform and previous eras is the notable absence of higher education as a driving force. In the 1890s, for example, all the most important reports of the period were authored either by university personnel or by committees on which higher education was well represented. Similarly, in the wave of curriculum development that followed in the wake of Sputnik and the calls for high school reform in particular, higher education was the leading voice. Colleges and universities have been peculiarly silent to date on school restructuring, except to indicate concern that educational reform not result in the lowering of standards. In part this is a reflection of the fact that current reforms are not necessarily focused tightly on the college-bound, but on the total educational environment and on the improvement of the performance of all students.

Although this trend appears to be changing as a number of higher education systems launch efforts to modify admission criteria to accommodate students educated in restructured high schools, colleges and universities are taking these steps to accommodate, not to drive, changes occurring in high schools. This lack of leadership foreshadows tough times ahead for postsecondary education if it becomes the last bastion of the educational system developed at the turn of the century under its influence and guidance.

CHAPTER 2

THE WHYS OF EDUCATIONAL RESTRUCTURING

Not everyone agrees that schools need to be restructured. Many teachers and parents, in particular, believe that schools are about as good as they can be given the resources they have and the challenges they face, and that there is little to be gained by attempting large-scale change in education. At the same time, the world within which schools exist continues to change in many ways. Social, political, and economic systems are changing, evolving, adapting, fracturing, and in some cases imploding at an ever-increasing rate. Old institutions, beliefs, assumptions, and behaviors no longer seem adequate to deal with the problems and issues that citizens in complex societies face today. The ever more rapid pace of technological development also creates an environment in which patterns of human behavior and relationships that have been constant for literally thousands of years are being altered, and new skills are needed to prosper or even to survive.

This chapter is based on the assumption that the reader is at least somewhat aware of the types of criticisms that have been leveled at the education system over the past several years. Therefore, the discussion offered here of the forces underlying the need to restructure education is general in nature. There have been many excellent summaries of the statistical data that demonstrate how students are prepared currently in schools, how particular ethnic and racial groups are not achieving at levels comparable to their peers, and how the number of at-risk students are growing rapidly and schools are not prepared to cope with their needs.*

This chapter examines broader trends in society that help create the imperative for schools to change. These trends have influenced the thinking of policy-makers and educators as they have considered the types of changes necessary for schools.

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* See, for example: Anrig and Lapointe (1989); Lapointe, Mead, and Phillips (1989); Beck (1990); Benjamin (1989); Broder (1991); Carlisle (1988); Carnevale (1992); Cetron and Gayle (1991); Cetron, Rocha, and Luckins (1988); Dumaine (1989); Frymier and Gansneder (1989); Hodgkinson (1988); Pennar (1991); Szabo (1990); Wanat (1991); Weisman (December 11, 1991); and Commission on the Skills of the American Work Force (1990).

SOCIETAL FORCES FOR CHANGE

In an earlier work I analyzed the rationale for restructuring by considering changes occurring throughout society in terms of three broad and somewhat overlapping categories: economic forces, social forces, and technological forces (D. Conley, February 1991). The basic points from that analysis are presented here. However, the reader is advised to consult the original work for a more detailed treatment of the topic. A brief summary of these forces, with an additional dimension, Performance of American Students on International Comparisons, follows.

ECONOMIC FORCES

The economic system is transforming in ways that have implications for all social institutions, including schools. Some of the elements of the transformation that have the greatest potential impact upon the schools include the following:

- The continuing transition from a work force composed predominantly of low-skilled workers and a small, highly educated managerial elite who made decisions to a work force in which front-line workers are key decision-makers (Reich 1988, 1990).
- Increased economic competition from Asia and Europe that has led to an accelerated rate of change in the business world and the necessity for teamwork in the workplace ("The New Industrial Relations" 1981, Mandel and Bernstein 1990).
- Less access to "guaranteed" jobs for high school dropouts through the old means such as trade unions, one major employer in a community, or use of "old boy" network.
- Increasing polarization in the creation of new jobs, with many high-education and many low-education jobs being created, and almost no new "blue-collar, family wage" jobs.
- A dramatic increase in "leased workers," individuals who work long term for a company but are employed by an employment service, creating more mobility and job insecurity, and the need for workers to acquire skills to remain competitive ("Outlook Positive for Job Seekers" 1996).

- More racial/ethnic/gender diversity in the workplace and concomitant equal employment provisions for hiring that require employers to show a link between the prospective employee's knowledge and skills and the hiring decision.
- A global economy where companies function throughout the world, workers may have to travel or live outside the U.S. to progress in the company, and almost every business needs to understand its relationship to foreign competitors (Baker 1990, Hoerr and others 1990).
- A federal deficit that has become a centerpiece for governmental debate, and an apparent willingness by legislators to address the deficit, guaranteeing that there will be few additional federal monies available to support education, or any other social programs. This trend is accompanied by pressure for no tax increases at the federal and, in many cases, state levels combined with decreased rates of personal income growth, which in combination will inhibit the ability of state and local governments to raise taxes (Hollister 1990).
- A stable to shrinking work force that will be composed increasingly of women, minorities, and immigrants, groups traditionally not served well by public education, combined with the expectation that all new entrants into the work force be educated to some relatively high level of functioning (Hoachlander, Kaufman, and Wilen 1989).
- The elimination of middle-management positions throughout the economy during the late eighties and into the nineties, which resulted in responsibility for decision-making being pushed downward, requiring workers who are more able to think and managers who are more able to adapt; continued layoffs in large corporations, creating workers who must undergo retraining or develop new skills in midcareer.

SOCIAL FORCES

Some of the important social forces operating to produce change that will have an impact on public schools include the following:

- The changing structure of the family in the era of the "postnuclear family," the increase in single-parent families, the concomitant disintegration of extended support networks for families; the tendency for any crisis to throw a family off balance for an extended period unless some sort of external assistance is available (Wanat 1991).

- The increase in the number of children who are living in poverty (Moynihan 1988, Pennar 1991).
- The apparent failure of social welfare and social-service programs nationally to address the escalating needs of families; a lack of interagency cooperation, which results in duplication and overlap among social-service programs and many programs offered by schools (Liontos 1990).
- The failure of schools as vehicles for desegregation or for equal educational performance for minority students (Olson, October 17, 1990; Stockard and Mayberry 1992); the increasing polarization along economic and racial lines, particularly in urban areas (Bates 1990).
- A decreasing sense of civic responsibility, of social tolerance, of a social contract among citizens for the benefit of all; a lack of understanding of the principles of democratic rule by majority with respect for the rights of the minority; decreasing participation in the electoral process and in decision-making at the local level (Boyer 1990).

TECHNOLOGICAL FORCES

Technological forces include a broad array of new techniques for organizing, communicating, and disseminating information that raise some of the following issues:

- Schools are neither organized nor funded in a way that enables them to keep up with changes in knowledge or changes in technology used to store and present such knowledge (Elmer-Dewitt 1991, Levinson 1990).
- Textbooks are an obsolete technology, yet they continue to be central to the way schools conceive of teaching and learning.
- Knowledge is becoming more accessible to more of the population. Therefore, the teacher's role as subject-matter expert must change.
- Information need no longer be stored in memory for it to be useful; the ability to access information will be as or more important than the ability to store information in one's memory (Bugliarello 1990, Sheingold 1991).

- The structure of knowledge is rapidly evolving. The division of academic disciplines is no longer appropriate for understanding or solving the problems that exist in the world, yet schools cling to this one structure to the exclusion of other possibilities.
- Information is coming to be seen less as an end in itself than as a means to an end, an essential ingredient in problem-solving. Curricula that focus on information as an end in itself (fact-based rote learning) can be counterproductive, extinguishing the curiosity and inquisitiveness of the learner and providing little practice in applying information to solve problems.
- Schools have defined technology as computers. There are many types of technology in addition to computers that will have an equal or greater impact on learning (D. Conley, February 1991, pp. 8-10).
- Schools are not moving to integrate technology, nor are they keeping up with the latest developments; in fact, they are falling farther and farther behind as the equipment they purchased in the 1980s becomes obsolete and they are unable to purchase new equipment (Elmer-Dewitt 1991).
- Statistics such as the number of computers per teacher are worse than useless as a measure of progress to determine effective use of technology in schools; careful examination of schools' attempts to use computers yields results that are dismaying and disheartening (Borrell 1992).

PERFORMANCE OF AMERICAN STUDENTS ON INTERNATIONAL COMPARISONS

The performance of American students on international comparisons continues to be a topic of discussion among policy-makers. While Berliner and Bracey in particular caution against using these scores for policy-making purposes, the issue of test scores continues to come up in discussions of the shortcomings of public schools. Therefore, it is important to understand test scores if they are influencing public policy, even if they are not the most appropriate tool for the task.

The results compiled below, combined with studies that compared performance to standards American educators agreed were reasonable, indicated gaps in performance between American students and those from other countries:

- Husen (1967) reports results from tests conducted in 1964: "The International Study of Achievement in Mathematics compared achievement in twelve countries: Austria, Belgium, England, Finland, France, West Germany, Israel, Japan, the Netherlands, Scotland, Sweden, and the United States.... Japanese students excelled all others, regardless of their socioeconomic status, while the U.S. students ranked near the bottom."

- A 1974 study of science achievement found that although the brightest American students fared well in reading, they did not perform as well in science: "Assessments reveal that, while 10 percent of the top United States students excelled similar groups in all other countries in reading, in science they occupied seventh place" (Hechinger and Hechinger 1974).

- The National Assessment of Educational Progress report released in 1989 (Lapointe, Mead, and Phillips 1989) contains a great deal of evidence to suggest that American schools have not improved much during the past decade and that they do not educate the vast majority to high levels. While noting improvement in basic skill acquisition from the midsixties to 1980, Anrig and Lapointe (1989) observe that most of the improvement took place before 1980. "The trend line stopped moving up in 1980 and has remained virtually at the same level for the past eight years" (p. 5). The report goes on to present some of the following information:

    - While 40 percent of American thirteen-year-olds could regularly solve two-step problems in mathematics, close to 70 percent of Canadian students at the same grade level could do so.

    - While only 9 percent of American thirteen-year-olds could understand certain mathematical concepts, 40 percent of Korean thirteen-year-olds could do so most of the time.

    - The decline in mathematics achievement continues through high school, so that by age seventeen far fewer than 10 percent of American youth have mastered algebra, geometry, and the ability to solve multistep problems.

    - In writing, only 25 percent of seventeen-year-olds can write an adequate analytic paper from given information.

    - Only 20 percent can write a persuasive letter to the principal.

    - Only 28 percent can write an adequate essay in the imaginative area.

- In the opinion of the hundreds of people who served as NAEP advisors, it seemed reasonable to assume that at least 80 percent of thirteen-year-olds could do the following tasks:
    - answer four factual questions about a simply written single-page description of the development of a game of basketball—*only 6 out of 10 can do so;*
    - select, from four options, the correct answer to the question, "Which is true about 87 percent of 10?": "It's greater than, less than, equal to, or can't tell"—*only 2 out of 10 can do so;*
    - recognize that different soils affect plant growth—*only 5 out of 10 can do so;*
    - write an adequate informative report about a simple personal experience—*only 2 out of 10 can do so* (Anrig and Lapointe 1989, p. 9)
- Ravitch and Finn (1987) found in a study of the nation's seventeen-year olds "abysmally low levels of general knowledge about common facts, events, people, authors, and ideas in history and literature" (McDaniel 1989).
- Stevenson and Stigler (1992) developed "culture-fair" tests to compare the performance of American and Asian students in mathematics and reading. Their conclusion was as follows:

> A close examination of American children's academic achievement rapidly dispels any notion that we face a problem of limited scope. The problem is not restricted to a certain age level or to a particular academic subject. Whether we look at the average scores for schools or at the scores for individuals, we find evidence of serious and pervasive weakness. In mathematics, the weakness is not limited to inadequate mastery of routine operations, but reflects a poor understanding of how to use mathematics in solving meaningful problems. Nor is mathematics the only subject in which American students do poorly. We have presented evidence of the overrepresentation of poor readers among American children, and American students have fared badly in international studies of achievement in science. (p. 50)

The performance of American students on international comparisons, and on achievement tests, is a complex and emotion-laden issue. As noted previously, Bracey (1991, 1992) and others (Hodgkinson 1991, Berliner 1992, Carson, Huelskamp, and Woodall 1991) have criticized the use of test data and international comparisons as the basis for judging the performance of American students. For example, Bracey

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questions the value of the International Assessment of Educational Progress, which uses scores from 9- and 13-year-olds:

> Is a multiple-choice test the most appropriate measure of a nation's achievement? Even if it is, is there any relationship between test scores at ages 9 and 13 and later accomplishments by individuals or by nations? Is it wise to give weight to the scores of 13-year-olds... [who] might well rank next-to-last—ahead of only the seniors [in terms of groups that] don't take tests seriously. (p. 108)

There is widespread concern among these writers that the media are focusing on negative test scores. Bracey (1992) states that *Newsweek's* coverage of the results from the International Assessment of Educational Progress (IAEP-2) released in February 1992 "reflects the perverse attention that education gets from the media—when it gets any attention at all" (p. 108). The net effect of such attention seems to have been to foster public opinion that there is a crisis in education. Such perceptions must be acknowledged, whether accurate or not, and factored into any analysis of the motivators for change in American schools.

It is not my intention to impugn the efforts of American educators or to suggest that schools are intellectual disaster areas. Quite the contrary, many educators are exerting superhuman efforts to sustain a system that appears to be having great difficulty adapting to the changing needs of students. Frymier (1992) emphasizes this point in a description of his national study of at-risk students:

> The data collected in the Phi Delta Kappa Study of Students at Risk underscores the point that teachers and others in schools are working hard—very hard—to help children who hurt and children who fail. Whether or not these efforts are effective cannot be determined from these data. The fact that general concern about the problem of children at risk is so widespread in America suggests that such efforts are insufficient, ineffective, or both. But the efforts are real. Anyone who wants to fault schools for not trying has not studied these data carefully.
>
> Still the crucial question remains: How effective are the programs and practices being used today to help students who are at risk? (p. 259)

Issues pertaining to the performance of American students, as well as the societal changes outlined in the preceding section, have received wide exposure and discussion through the media and in educational journals and conferences. There is, however, another set of issues that may have as profound an impact on education ultimately as those listed above. These emerging issues reflect changing values within society, changes that have been occurring gradually for perhaps fifty years or more. In combination with the factors listed previously, these issues suggest that change in education is inevitable, if only to bring schools into closer alignment with societal values.

CHANGING VALUES WITHIN SOCIETY

The data and trends presented in the previous sections make the case that, if nothing else, the world around schools is changing. Other less tangible forces may also serve to influence the types of changes that may need to occur in schools. These forces can be thought of as value shifts that are taking place at the societal level. In some senses these shifts are more difficult to perceive than those present in demographic data. Often they are best observed in hindsight. As one looks back on a decade or more, these shifts become more apparent; in day-to-day life they may be less apparent.

Why is it important for educators to take these value shifts into account when considering change in schools? The primary reason is that these value shifts often form or influence the context within which policy decisions are made in a representative democracy such as exists in the United States. Policy-makers at the local level (school board), state level (legislature and governor), and federal level (Congress and the President), along with various lobbying and special-interest groups, are influenced, consciously or otherwise, by large-scale trends in this society, and, increasingly, the world at large. The ideas that are proposed and the solutions that are entertained are shaped by this value framework, which suggests the desirable goals of public policy and the most appropriate means by which to attain these goals.

This is true in part because schools rarely utilize systematic data in setting goals, assessing performance, or diagnosing organizational strengths and weaknesses. Similarly, research on effective educational practices may not be considered systematically when new programs or plans are being developed. In the absence of attention to data and research, policy-makers are more susceptible to generalizations and intuition as they formulate responses to educational problems. In such an environment, large-scale trends are more influential.

While changes are occurring in many different constellations of values, there are four interconnected values in particular that public education does not necessarily reflect well: (1) the increased value placed on the individual and individual rights, (2) the triumph of the marketplace as an economic model, (3) the rise of democratic systems of government, and (4) the changing needs of the work force. These sets of values are not likely to be useful as outlines for particular strategies to be employed at the school site. But they are worth examining as ways of thinking about the solutions policy-makers are likely to entertain or value. These values do help explain why one program or strategy might be more or less attractive to decision-makers, all other things being equal. They also suggest the type of language and rationale that might be used to justify or undergird a program of school restructuring.

INCREASED EMPHASIS ON THE INDIVIDUAL AND ON INDIVIDUAL RESPONSIBILITY

Robert Bellah and others (1985) have written eloquently about the strong tradition of individualism in American society and its effect on our social institutions:

> Individualism lies at the very core of American culture.... There is a biblical individualism and a civic individualism as well as a utilitarian and an expressive individualism. Whatever the differences among the traditions and the consequent differences in their understandings of individualism, there are some things they all share, things that are basic to American identity. We believe in the dignity, indeed the sacredness, of the individual. Anything that would violate our right to think for ourselves, judge for ourselves, make our own decisions, live our lives as we see fit, is not only morally wrong, it is sacrilegious. (p. 142)

While Bellah and others also note the importance of collective action and its role in American society, the trend over the past thirty-five years appears to have been to define more clearly the rights of individuals, particularly those less able to compete on an equal footing in society. It began with the civil-rights movement of the late fifties and sixties, which was designed to ensure that every individual had an "equal opportunity" to succeed in American society, both economically and socially. This is not to deny the importance of collective action, but only to note that from a policy perspective, significant effort has gone into ensuring the rights of individuals. This has an effect on the ways institutions come to be organized and to function, particularly bureaucratic institutions that are sensitive to laws and regulations.

Following on the heels of the civil-rights movement were several other pieces of legislation that emphasized the value of the individual. Title IX, which guaranteed equal access by women to athletic opportunities, is only one example of a flurry of legislation designed to ensure equal treatment for women. The Education for All Handicapped Children Act (P.L. 94-142) opened the door for many students who had been denied a public education. It also required schools to provide programs on an individualized basis for students with demonstrated special needs and guaranteed the rights of parents to participate in the placement of their children with special needs. More recently, legislation to ensure the rights of HIV-positive and AIDS-infected students to an education has been enacted in various states. Most recent of all, the Americans with

Disabilities Act extends protections to individuals with a wide range of limiting conditions. These laws collectively represent the output from an extraordinary period of governmental support for individuals who have historically been unable to compete equally in society. It's important to note we may have reached the high point of this period.

Recent directions at the federal and state levels by both political parties signal a shift back toward individual responsibility. The new wave of rhetoric and subsequent legislation seeks to reestablish individual accountability in areas from welfare to teen parenting to child support to divorce. Legislators seek simple solutions by which they can legislate desired values back into being. We may be entering a period when the historical emphasis on the individual in American society may be interpreted in the direction of responsibility, not protection.

Schools may find themselves caught in a crossfire. On one hand, they have been limited in their ability to control, discipline, or compel students. On the other, they are expected to ensure that students individually take responsibility for their actions in school so that they are prepared to act responsibly and to understand the consequences of their actions once they become members of society. This would imply tighter standards, fewer social promotions or second chances, trends that run counter to developing each individual, particularly those who are less able to compete by virtue of some characteristic not of their own choosing.

It is interesting to speculate about the reasons underlying the growing emphasis on the individual. Smaller family size, particularly after World War II, and lower infant and child mortality rates led parents to value each child more and to appreciate each child's individual characteristics. The increasing education level of each succeeding generation enlarged its members' world view and its sense that each individual had worth. And, as mentioned earlier, the complexity of the economic and social systems are such that individuals are being called upon to make more decisions of an increasingly complex nature, which inherently augments the importance of each person.

In all the examples cited above, the impetus for validating individual rights and recognizing unique differences and needs has come from outside the educational community. While educators do many things to meet the needs of students as individuals, schools and districts are not generally organized in a manner that views each student as a client with unique needs, characteristics, and circumstances. The model upon which much of secondary education is based, what Shedd and Bacharach (1991) refer to as the Factory Management Approach, is designed to minimize differences in order to maximize efficiency. They contend this model is based upon the following assumptions:

> - The purpose of a public school system is to provide students with training in a common, basic set of academic skills.
> - Teaching is a relatively straightforward process. The situations that teachers face can be anticipated, and appropriate behaviors for handling those situations can be specified in advance.
> - Except for age differences, students are a relatively homogeneous group. Differences in their needs and abilities within age groups are minimal or irrelevant. (p. 52)

Much of the difficulty in changing the model under which public education operates will stem not from the specific programs schools propose to undertake, but from the implicit value structure embedded in the Factory Management Approach, whereby the needs of the individual are clearly subordinated to the efficient functioning of the institution.

The increasing emphasis on the value and worth of the individual can easily lead in American schools to individual isolation. Classes and schools are organized in ways that define instruction and learning as something that occurs and is tested at the level of the individual. Team assignments are viewed with suspicion; collaboration is often labeled as cheating. Classroom organization may inadvertently reinforce some of the worst aspects of individualism, while doing little to develop the capacity for behavior and action of a collective nature. Stevenson and Stigler (1992) describe the organization of American classrooms:

> Americans emphasize individuality, an emphasis that has both emotional and academic costs for children. Teachers often leave children to work alone at their desks, and frequently divide the class into small groups, separated according to the children's level of skill. Teachers spend a good deal of time working with these groups and with individual children, and the class operates as a whole only part of the time. So each child spends relatively little time in direct interaction with the teacher. Children spend most of the school day in the classroom, with little time for play and social interaction. As a result, one senses that American children often feel isolated and lonely. Partly for this reason, they are less enthusiastic about school than their Chinese and Japanese peers. Until the school day is reorganized so that there is time for more than six subjects and a fast lunch, it is unlikely that school will assume a central place in the lives of American children. (p. 69)

The increasing emphasis on the individual holds the potential to be both a blessing and a curse. If American schools only legitimize one form of learning and achievement, that done by an individual, students will find few reasons to cooperate, and to develop interdependence and social-learning skills. At the same time, the reliance on batch processing models, in other words, the factory approach, will likely not be successful as a means to develop skills in group and collective action that appear to be important both for learning in school and for functioning successfully in the future. Schools have a long way to go to take into account the changing conception of the individual and of the individual's rights in today's society.

THE 'REINVENTION' OF GOVERNMENT

Several trends have contributed to the reexamination of government worldwide. In almost every case the trend has been toward decentralization of authority and increased emphasis on local decision-making. Part of this movement springs from the ascendance of the "marketplace" economic model over state-controlled approaches.

By its very nature the marketplace model affirms a preference for individual decisions over the forces of bureaucratic central planning. In marketplace economies it is the microdecisions made by myriad individuals that in theory determine prices, products, markets, employment patterns, and the ultimate structure of communities. The pronouncements of faceless bureaucracies are to be avoided to the maximum degree possible.

Whether this is how free-market economies actually operate is not the point. The perception in much of the world that such an economic system provides the best hope for individual and collective prosperity is what matters. This is particularly important for educators to consider, given that key elements of the marketplace philosophy are choice and competition, two concepts that are troublesome to public education. Given the symbolic power of the image of the free market, policymakers have been much more willing to look toward choice and competition as concepts to "rescue" public education.

The perceived failure of "big government" worldwide to solve complex problems will push private-sector ideas and experiments in education to the forefront of discussions. "It's a top-down system. It's a rule-driven system. And any rule-driven system, as evidenced by what's happening in Russia and Eastern Europe, just stifles creativity and innovation and is not attuned to the market" (Olson, September 18, 1991, p. 19). This statement is a good example of the type of logic that may underlie proposals for overhauling education during the coming years.

A second trend contributing to the reinvention of government is the resurgence of belief in democratic institutions as the best means to address complex social problems.

The growth of democratic institutions throughout the world clearly goes hand in hand with the development of the marketplace. However, the spread of democracy has some additional implications for educators. Once again, this trend reflects thinking in broad terms about the role of the individual in organizational contexts. Not only in political institutions, but in work settings and even family relationships, participation in decision-making is increasing. Taking a cue from the Japanese, the language of the workplace is moving from one of coercion to consensus ("The New Industrial Relations" 1981, Port and others 1990).

Ironically, in the face of the breakup of the traditional extended family, the rise of gangs, and increased violent behavior from some students, schools have been forced to develop more rules and regulations to maintain order in the classrooms and halls. In schools throughout the nation, discipline and attendance policies often top the list of topics considered for school-improvement efforts. This emphasis on refining the tools of control is quite logical in the context of the Factory Management Approach. However, if most of a school's energy is devoted to behavior-management issues, little is available to improve its instructional program in ways that may increase students' engagement and subsequently decrease behavior problems more permanently.

Smith and O'Day (1991) discuss the relationship between the goals of the reform movement and the focus of many schools on discipline and attendance as solutions:

> If the school is to be successful in promoting active student involvement in learning, depth of understanding, and complex thinking—major goals of the reform movement—its vision must focus on teaching and learning rather than, for example, on control and discipline as in many schools today (McNeil 1986). In fact, the very need for special attention to control and discipline may be mitigated considerably by the promotion of successful and engaging learning experiences. (p. 235)

The challenge in this situation may be not how to develop a "perfect" attendance or discipline system, but how to engage students actively in an education that has some intrinsic meaning and value to the student, and how to enlist parents and community members as equal partners in the process of determining the goals of education. The inconsistencies become more apparent when teachers and parents demand greater involvement in decisions. The adults want participatory decision-making and democracy. But it is hypocritical to propose that adults should work and interact in less coercive environments and then turn around and use this enhanced freedom primarily to control children more effectively. In this new model of government, local control is a tool for improvement, not just control.

Further contributing to the reinvention of government is the leveling off and, in many cases, decrease in consumer purchasing power over the past twenty-five years, and the past fifteen years in particular. During this period, only the highly educated and economically privileged have increased their purchasing power in real-dollar terms. The result has been that government has seen slower growth or decline in its revenues, in part because significant revenue comes from taxes on the middle class, and in part because citizens are resistant to increased taxes when their own incomes are not increasing.

The net effect has been to squeeze government, particularly over the past ten years. Public agencies can no longer count on automatic increases in their budgets. Staffing levels have been frozen or reduced for years on end. A school cannot count on solving an educational problem, for example, by hiring a new teacher or developing a new program. Existing staff and resources will have to do. Schools are not accustomed to such limits, since their per-pupil funding has increased consistently and significantly since the early 1900s, and particularly since 1950.

The reinvention of government means public agencies are going to be expected to develop solutions, not just programs, that they are going to have to solve problems with constant or decreasing resources, and that they will be expected to involve those affected by the programs in important decisions (Odden 1996). As government moves closer to the level of problems and services, accountability is also increasing. Schools can expect to have more autonomy, but also closer scrutiny to see if they are wisely using the resources allocated to them.

These trends in combination have significant implications for schools. Accustomed to functioning as protected bureaucracies, schools are now being asked to become adaptive, efficient, and results-oriented.

THE INFLUENCE OF WORK FORCE NEEDS

As noted earlier, the business community has exerted significant influence. The way the argument for greater economic productivity and adaptability is translated into calls for educational reform can be better understood by examining some of the key documents that describe businesses' agenda for education. Whether or not one believes that the influence of business on educational purposes and programs is a good thing, it is neither reasonable nor realistic to discount the influence that the organized, systematic efforts launched by various business-related groups have had on policy-makers throughout the nation.

Three reports from organizations outside education indicate the direction the private sector wants education to take to adapt to changing economic realities. In 1990 the Commission on the Skills of the American Work Force published *America's Choice: High Skills or Low Wages*. American workers, the report says, are at a crossroads: They must develop higher skills to produce goods with high value on the international market or face decreasing wages as they compete with low-wage Third World workers in the production of low-value, mass-produced items. According to the commission, America must resolve these fundamental questions regarding public education:

- Do we continue to define educational success as "time in the seat," or choose a new system that focuses on the demonstrated achievement of high standards?
- Do we continue to provide little incentive for non-college-bound students to study hard and take tough subjects, or choose a system that will reward real effort with better pay and better jobs?
- Do we continue to turn our backs on America's school dropouts, or choose to take responsibility for educating them?
- Do we continue to provide unskilled workers for unskilled jobs, or train skilled workers and give companies incentives to deploy them in high performance organizations?
- Do we continue in most companies to limit training to a select handful of managers and professionals, or choose to provide training to front-line workers as well? (pp. 8-9)

A second report, which also has been widely circulated among educators, indicates more specifically the types of skills that employers desire in employees in the 1990s. Entitled *Workplace Basics: The Skills Employers Want* and produced jointly by the American Society of Training and Development and the U.S. Department of Labor's Employment and Training Administration, the report was the result of interviews with employers throughout the nation. The report concludes that employers are looking for seven different skill strands:

- Employers want employees who can learn the particular skills of an available job—who have "learned how to learn."
- Employers want employees who will hear the key points that make up a customer's concerns (listening) and who can convey an adequate response (oral communication)....
- Employers want employees who have pride in themselves and their potential to be successful (self-esteem); who know how to get things done (goal setting/motivation); and who have some

sense of the skills needed to perform well in the workplace (personal and career development).

- Employers want employees who can get along with customers, suppliers or coworkers (interpersonal and negotiation skills); who can work with others to achieve a goal (teamwork); who have some sense of where the organization is headed and what they must do to make a contribution (organizational effectiveness); and who can assume responsibility and motivate co-workers when necessary (leadership). (Carnevale, Gainer, and Meltzer 1990, p. 8)

A third report that has also been reviewed and discussed by many school faculties, superintendents, boards of education, state legislators, and departments of education interested in reform was commissioned by the U.S. Department of Labor and entitled *What Work Requires of Schools: A SCANS Report for America 2000* (Secretary's Commission on Achieving Necessary Skills 1991). It identifies five competencies and a three-part foundation of skills and personal qualities that the commission described as necessary "for solid job performance." These competencies and skills are as follows:

COMPETENCIES—effective workers can productively use:

- *Resources*—allocating time, money, materials, space, and staff
- *Interpersonal Skills*—working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds
- *Information*—acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information
- *Systems*—understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems
- *Technology*—selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies

THE FOUNDATION—competence requires:

- *Basic Skills*—reading, writing, arithmetic and mathematics, speaking, and listening
- *Thinking Skills*—thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning
- *Personal Qualities*—individual responsibility, self-esteem, sociability, self-management, and integrity (p. vii)

In even a cursory examination of these three reports, readers will be struck by the degree of congruence between what the business community says it wants from workers and the qualities many educators might say they want to cultivate in students. One interesting aspect of the current move to restructure public education is the degree to which the agendas of many neo-Progressives and elements of the business community overlap, albeit in an inadvertent manner and for very different reasons. Both groups tend to advocate the following ideas:

- Curriculum that moves from a primary emphasis on rote learning and factual information to a greater emphasis on problem solving, application, and integration of knowledge and higher-order thinking.
- Students who are actively engaged in learning, who are not being trained simply to do what they are told.
- Learning that is best assessed in terms of outcomes, not processes; the inadequacy of seat time as the primary means to demonstrate mastery; the ability to apply or demonstrate a skill or set of knowledge as the best way to assess whether learning has really occurred.
- Education that extends beyond the walls of the classroom; students who apply knowledge and acquire new skills, information, and insights in the larger community.
- Teachers who facilitate learning, not control it; one of the key goals of education being to create lifelong learners, to develop a student's learning skills, not merely to transmit a body of information in a way that leaves the student with negative attitudes about learning.
- Students who learn to work in groups and as members of teams, not solely as individuals, and learn to work with students who are very different from themselves.
- The belief that each learner is valuable; no "expendable" students; students who have positive self-images and the ability to define goals for themselves.
- "Process" skills considered as important as knowledge of specific content.

The business community can be seen as more interested in what I call "generic work-readiness" skills, and less interested in specific job training. Schools seem unlikely to be able to offer much occupational training that is worthwhile in today's economy in the same way that they have offered shop, business, and related classes throughout the twentieth century. Schools can, however, prepare students with the general skills needed to succeed in any work setting. These are the skills that are outlined in the three reports, and that align in many respects with other efforts to redesign curriculum and instruction.

There is an inherent tension when the business community becomes involved in determining the goals and methods of education. Even though some commonality exists between business and educational reformers, the effect of this should not be overstated. Business is pursuing a focused agenda based on the principle that well-educated people will be good citizens and productive workers. Educators are focusing on developing the individual so that he or she can have a fulfilling life. These are not mutually exclusive goals. But neither are they the same goal.

The more educators and business leaders talk, plan, and understand each other's perspectives and goals jointly, the greater the probability that educational restructuring will succeed. Currently, the business community is the most well-organized, sustained, and credible voice calling for fundamental change in public education. Should business leaders decide public schools cannot be successfully salvaged (as some have already concluded), their abandonment of educational reform will have significant repercussions in local districts and legislative bodies throughout the nation.

It should be recognized at this point that what is occurring is a reexamination and refocusing of the basic purposes and goals of education, not merely the adaptation of existing practices and procedures within an unquestioned structure of values and goals. While education in America has always had a utilitarian dimension, it has also had a sorting dimension as well. Students were to learn things they could use, but education was also to distinguish between workers and managers, at the least. Educational restructuring increases the emphasis on the economic utility of education; everyone needs "work-readiness" skills. At the same time, schools are being asked to prepare all students to reach a high level of performance and to avoid sorting them prematurely. The degree to which schools can redesign themselves to accommodate this challenge will affect this country's economic productivity well into the next century.

The issue of the goals and values of education is taken up in more detail in the next chapter, which suggests new ways of thinking about schooling that may be developing today and that have implications for the ways in which educational experiences are constructed, how schools are structured, and how people relate to one another within the institution of school.

CHAPTER 3

CREATING NEW ASSUMPTIONS ABOUT SCHOOLS, SCHOOLING, AND STUDENTS

Changes in the values of society inevitably have profound effects on education. Although schools profess "neutrality" on issues of values and morals, all schools possess implicit value and moral structures. To some degree, these structures generally mirror the community in which the school exists. Such an arrangement makes perfect sense. What happens, though, when value and moral systems are in flux or when the community has more than one value system? The compass does not point north with consistency. What are schools to do in an environment of conflicting signals?

Much of the restructuring movement has concerned itself with changing the structures of education rather than examining its values. However, structural changes carry with them implied moral and ethical assumptions. It is worthwhile to examine some of these implicit assumptions embedded in the goals of school restructuring. Each of the six statements that follow was gleaned from a reading of the restructuring literature, what some have called the "new conventional wisdom" (Olson, August 5, 1992). The list reflects values positions and social goals for schooling, in addition to specific structural changes. Educators and others can clarify their own goals for restructuring by carefully examining these statements and the values embedded in them.

1. Essentially all students can be educated to some relatively high level of functioning.

During the previous thirty-five years there has been a tendency by policy analysts to interpret change in education as the movement back and forth between forces favoring equity (equality of educational opportunities for all groups) and those demanding excellence (high levels of performance by the most capable), with the additional dimension of efficiency being applied periodically (Lutz 1978, Marcoulides and Heck 1990). This model has been a useful construct for comprehending the turbulent forces to which public education has been subjected in the postwar era.

It may be that the polar relationship between these values is no longer the only or even the primary framework that should be applied to understand societal expectations for schooling. There is every indication that schools are now being expected to address both equity and excellence simultaneously, that schools will be expected to educate essentially all students to some relatively high level of functioning. Statistics on income growth indicate that over the past fifteen years, only those with more than two years of college have seen consistent increases in income. The notions that high school graduation is optional or that simply receiving the diploma itself is sufficient are obsolete. What is learned is now critically important, since almost all students will continue in formal learning settings within the next five years following high school graduation. Nearly 80 percent will attend some combination of two- and four-year institutions during that period. To do so, these students must have reached some high level of knowledge and skill in the key areas needed to succeed in further education.

Exactly what such a level might be, or what students will be able to do upon completion of such an education, is currently the subject of heated discussion and painstaking work by policy-makers, state departments of education, university and school faculty, and the public at large.

It is becoming increasingly clear, however, that dropout rates of 25 percent are not acceptable, nor are rates of 20 percent, 15 percent, or even 10 percent. In addition, the model of keeping students in school, "warehousing" them until they are old enough to work, will no longer work either. How will schools retain and educate those students who are likely to abandon education because they feel it has little meaning or value for them? How will schools adapt if there are no longer "winners" and "losers," if all students are expected both to graduate and to achieve at relatively high levels?

For starters, the notion of intelligence as a unidimensional construct that is distributed throughout the population in a way best described by a bell-shaped curve will have to be challenged (Gardner and Hatch 1989, Gardner 1983 and 1991). So long as this assumption is accepted as the basis for educational practice there must be winners and losers *by definition*. Much of generally accepted educational practice is based on this deep, unspoken, unquestioned assumption. Practices such as tracking, standardized testing, grading on a curve, talented and gifted, and remedial education are all based on the notion that some are inherently more able, others less able and incapable of benefitting from the educational opportunities offered to the more able.

It is difficult to overestimate the pervasiveness of this mode of thinking or the difficulty of challenging its acceptance by educators. Gardner (1983) offers one alternative way of thinking about intelligence when he suggests that there may be (at least) seven intelligences: verbal, logical-mathematical, musical, bodily/kinesthetic, spatial, interpersonal, intrapersonal. These notions help educators rethink what it means for students to be successful; success can occur in many different arenas yet still be validated by the school.

The Japanese educational system, whatever its weaknesses, demonstrates that it is possible for essentially all students to reach some prescribed level of performance. This is a system in which 97 percent of the students graduate from high school, apparently at reasonably high levels of achievement.* Similar results can be found in some Scandinavian educational systems. If this is true, then it presents an alternative to the notion of the normal distribution, or at least calls into question the level of performance most students are capable of achieving in public education. Denis Doyle (1991) states that "depending on whose data sets you use, the top 5 percent of the Americans are at the Japanese average (by about grades 5 or 6)" (p. 16).

There are (at least) two possible conclusions: one, that the Japanese are genetically superior, a rather unpalatable and wholly unsubstantiated assumption; or, two, that somehow they are able to avoid the phenomenon of the normal curve. The notion that the Japanese, or any other Asian culture, is superior genetically is refuted by the research of Stevenson and Stigler (1992):

> The hypothesis that the academic weakness of American children is due to deficiencies in innate intellectual ability is without merit. American children obtained scores highly similar to those of the Asian children on a culturally fair test of intelligence, and we have found no sound evidence that American children's academic problems stem from a deficiency in handling abstract concepts. (p. 50)

Certainly there are cultural difference. Most important, perhaps, is the degree of cultural and economic homogeneity in the nations cited. This sameness makes it easier to hold common expectations and assume everyone can achieve them. However, it would seem logical to examine these systems to see how they attain consistently high achievement, rather than simply conceding that Americans cannot duplicate such performance. Stevenson and Stigler (1992) summarize this issue in these terms:

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*These figures refer to the public education system. The private "cram schools," or jukus, are primarily for the university-bound student. Therefore, the public system achieves these results with many students who are not attending the Saturday afternoon jukus.

> The puzzle lies in trying to understand the poor performance of American children. If explanations that rely on innate endowment are unsatisfactory, then we must look to children's everyday experiences. The most likely locales are those where children spend most of their time: home and school. (p. 51)

The lesson to be considered is that it is *possible* to educate essentially all students to high levels of academic functioning. The impact on student achievement of the teacher's expectations in American schools is well documented (Alderman 1990, Patriarca and Kragt 1986, Smey-Richman 1989, Whelan and Teddlie 1989). Sincerely believing that all students can achieve at high levels and designing schools in which this occurs may be the greatest challenge ever faced by the American educational system.

2. Learning is what students can do at the conclusion of education, not simply the processes in which they have participated.

As mentioned in chapter 1, the Carnegie unit was established to ensure consistency and to institute some form of quality control among high schools for the purpose of college admissions. The Carnegie unit created consistency of process; all students spent the same amount of time in a classroom for the same amount of credit. It did not address performance—what students could do after spending that time in a classroom. Now the emphasis has shifted from the courses taken or grades received to what the student is able to do at the conclusion of an education.

For educators this emphasis on performance translates into a movement away from evaluation (reaching some sort of summary judgment) to assessment (providing ongoing feedback based on the application of skills). Assessment involves more public demonstrations of skills. Currently schools use public demonstrations in certain areas, primarily to entertain (music assemblies, sports events), not to show public accountability for student learning.

Interestingly enough, public demonstrations were part of public education in the 1890s when, at the end of each week, students recited their lessons to an audience of parents. It quickly became apparent which students knew their lessons and which did not. Unfortunately, this demonstration often resulted in humiliation for the less capable or less studious. Current methods of performance-based assessment contain safeguards against this type of humiliation by having several practices before any public demonstration, and by having clear criteria against which the performance is judged. The key concept here is that accountability for learning and applying skills is enhanced with public-performance requirements.

As teachers' conceptions of the goals and purposes of assessment change, they may come to view the process both as a component of learning and as the culmination of learning. This attitude stands in contrast to views of testing as a digression from the learning process, something standing separate from learning. To accomplish this integration of learning and assessment, greater emphasis in teaching is placed on diagnosing and educating each student against clearly defined performance standards and tasks. To do this, students must know the standards and be capable of considerable self-diagnosis. Instructional opportunities are somewhat broader to allow a wide range of students to meet the performance standards via differing instructional pathways.

3. Education has economic utility for essentially all students and for society.

Some educators express resentment toward those who state that the purpose of education is to prepare students for the work force. Many, perhaps most, educators believe that education has purposes other than preparing people for employment, and that public schools should maintain a healthy distance from business.

Without discounting the validity of this perspective, it is important for educators to acknowledge that education plays an increasingly critical role in determining students' economic future. Gone are the days when a student could drop out of high school and enter a high-paying job with a secure future. Given this reality, the linkage between the needs of the work world and the structure, content, and outcomes of a public education is becoming more and more tightly intertwined. One can argue the appropriateness of this linkage. However, it appears that this trend will continue for the foreseeable future, in part because education, in the form of training and retraining, is becoming such an integral part of the workplace. As mentioned earlier, it appears that knowing how to learn will be as important as the specific factual information one possesses.

Pennar (1991) summarizes current thinking on the economic importance of education:

> Today, economists agree that the widespread competitive and technological changes that occurred during the 1980s induced a sharp increase in the rewards for skill and education, thereby widening the gap in incomes. From 1980 to 1990, men with four years of high school saw their median incomes fall 15.5% in real terms. During the same period, men with four years of college experienced a gain in median income, after inflation, of 1.6%....

> ... "We have to ask ourselves whether the macroeconomy is becoming permanently hostile to less-skilled workers," says [Northwestern University economist Rebecca M.] Blank. If so, there will be considerable costs. First, there are the costs of having to support a population that is barely making it economically. Next, there's the potential cost of possible social disruption resulting from worsening income inequality and a population of persistently poor individuals. Finally, there's the cost of consigning people to low-productivity jobs when they and society could do better. (p. 88)

The challenge for educators centers on the way schools define and teach work skills. Since the 1920s, this has been done through a vocational track that taught specific trades to students. These trades either no longer exist or now demand skills that schools are not able to provide. As the results from the Workplace Basics survey indicate (Carnevale, Gainer, and Meltzer 1990), the line between a "vocational" and an "academic" education is beginning to blur, as all students are expected to acquire the skills of problem-solving, inquiry, team building, and oral and written communication. In addition, all students are expected to have high self-esteem, a love of learning, and a strong sense of personal efficacy. Compartmentalized or tracked programs of education will not be a productive strategy for achieving the desired level of performance from all students.

These "generic work-readiness" skills will be what schools will be expected to impart to students via career-exploration opportunities, career-pathway programs, internships, entrepreneur classes, onsite businesses at schools, visits to local workplaces, and other exposures to work. These will replace traditional vocational-education classes and work-experience and cooperative-education approaches. However, teachers from the programs that are being replaced can be key leaders in the development of these new programs. Teachers in traditionally academic classes, those that serve the college-bound student, will be challenged as well to link learning to application, to problems in the world outside schools, to help the college-bound student develop these same work-readiness skills.

Schools can be expected to be influenced by other concepts associated with the work world as well, such as choice, service, niche marketing, and competition. Whether (or how) schools adapt internally to oblige the press for greater accommodation of work-force needs is a critically important question for the nineties, with significant implications for the social structure of the nation as well as the structure of schooling.

4. Learners participate actively in their own education in a variety of ways. Learning is not primarily a passive activity.

One often hears from teachers and administrators that today's students are not like those in previous generations. Although this lament can be traced back literally thousands of years, today's educators might be right. This may be so because kids have changed—and because schools have not.

Clearly, today's student must be motivated in fundamentally different ways from children whose parents never questioned school authorities. In the 1950s, when corporal punishment was much more a normative form of behavior management, it would not be unusual for a student to receive a whack at school, notify his parent of the event, and receive two more at home. Fast-forward to the 1990s, when the same student now notifies his parent, and the parent's response is, "Contact the lawyer!"

While few people yearn for the "good old days" of the paddle, it is illustrative of the changes that have occurred between teacher and student, school and home. The school is fairly isolated from the home and community, the result of a series of insulating barriers established during the past eighty years to "depoliticize" education. These reforms were successful; one of their byproducts was to "professionalize" education at the expense of community involvement and ownership. Educators now find themselves looking for new ways to involve parents and community members in educational decision-making and to increase student motivation to learn.

Motivation comes largely from the child, though the social context in which the child exists is also an important factor in determining the child's interest in learning. In fact, writers on motivation argue that a teacher cannot "motivate" students, that motivation is internally controlled. Today's student seems less willing to perform tasks that lack clear meaning or purpose, that lack an inherent joy or sense of accomplishment.

Those students with clear sights on a college education still subscribe to the notion of delaying gratification and of doing the tasks that are asked of them. This creates the illusion for teachers that the system could still work, if only the other students had the right attitude. In the meantime, the remainder of the student body, or at least those in the "general-education" track, may just go through the motions, frustrating teachers, creating discipline problems, and expending as little effort as possible.

These differences in motivation often reflect different social, economic, racial, and ethnic backgrounds as well. In effect, certain groups are being disenfranchised from a public education in large measure because it is very difficult for them to become motivated to do the things teachers ask in the absence of any clear reasons to do so (other than receiving the teacher's approval). The degree to which this lack of motivation reflects racial, ethnic, and social-class distinctions should be of concern, since if particular groups are unable to reach desired performance levels, they will be unlikely to participate fully and productively in society and the economic system. An education that does not engage and motivate can inadvertently create a social underclass living on the fringes of society.

The current method of motivation is based on the teacher's input of energy. Teachers come to perceive themselves in Sisyphusean roles—pushing boulders up hills for most of the semester, only to watch them come rolling back down with depressing regularity. It is little wonder that teachers in such an environment are tired, frustrated, and often cynical. As they watch students at the end of the school year empty their binders of papers, each of which had been carefully scrutinized by the teacher, into large trash cans strategically placed in the halls for just this purpose, how can they help but become a bit jaundiced?

Active participation in learning suggests more extensive use of student-set goals. It also requires a wider range of instructional techniques such as project-centered learning, inquiry learning, simulations, cooperative and team learning, and more opportunities for real-world experiences, such as apprenticeships, internships, and mentorships, and field-based assignments and projects.

Teachers become to a greater degree diagnosticians and planners, tailoring and modifying educational experiences to student needs and interests. They develop strategies to overcome the many constraints on time, content of the curriculum, location of learning experiences, and methods of assessing learning that exist in schools today. This then allows more students to become actively engaged in learning.

It is important to emphasize the difficulty of actually organizing and carrying off such programs. Schools are used to doing everything on campus in structured time blocks, and experiences of the type described are more demanding for both teachers and students. They require more hours, more work of a higher quality, and more accountability than many current classrooms, which feature endless worksheets, reading assignments, and tests, the contents of which are quickly forgotten (Goodlad 1984).

Teachers do not subsidize this learning environment through their own energy. Instead, they often see their energy magnified as students respond to the guidance and direction provided. Teachers serve as catalysts, and their interventions energize learners, rather than frustrate them. More students succeed because there are more stimuli that engage them. In fact, it's nearly impossible to be passive in such learning environments; it requires more energy not to participate than to participate.

5. Education is a responsibility that extends beyond schools: Parents, employers, and community members have responsibilities for the education of the community's young, along with a right to be included as partners in important decisions about education.

As mentioned in the previous section, the partnership between the school and the broader community is in the process of seeking a new equilibrium point. Structural safeguards against arbitrary community intervention, such as tenure, curriculum and text-adoption policies, and formalized communication channels have been highly successful in constraining community influence on educational practice. The new challenge may be to define the proper relationship among various constituencies in schools and in the community. A balance must be struck between the professional responsibilities and prerogatives of teachers and administrators and the inherent rights of parents and community members to see that their children receive a quality education consistent with their values.

Some educators note that many communities are laden with pathologies—abusive parents, drugs, crime, lack of respect for authority. Other educators point to their community and warn of obsessive parents who push their children to achieve, special-interest groups supporting any number of programs, and a majority that cares little about what happens in school as long as it fulfills its warehousing function. These educators ask if they should be encouraging more involvement, and what the results would be. The degree to which these perceptions are accurate vary considerably from community to community. However, when educators feel they are incapable of success with students because these conditions exist, such beliefs can have the effect of self-fulfilling prophecy (Rosenholtz 1989a). Even if such perceptions are accurate, they may indicate a greater need to reorganize schooling and schools and a greater need for broader understanding and ownership of educational goals.

Changing the relationship with the community takes time and occurs incrementally. It requires trust and effective two-way communication. Both sides are called on to abandon old stereotypes and suspicions. Such changes do not take place overnight. However, the increasing importance of education and the complexity and difficulty of raising physically and emotionally healthy children compel a reexamination of the roles and responsibilities each group has assigned to itself. This is a process of social reconstruction in addition to educational restructuring.

The institutions of an industrial society do not appear to be adequate in a postindustrial, global society. New ways of meeting the emerging needs of people in such a society are developing. In essence, the concept of community is evolving and being reinvented. As this process occurs, the role of school in the community—and its relationship with the community—also evolves.

New governance structures and new methods of demonstrating accountability to the community will need to be considered. Specifically, schools can be expected to have goals, to involve the community in setting the goals, to undertake systematic programs to achieve the goals, and to report to the community success in achieving the goals. Involving parents and community in activities such as goal-setting will be meaningless unless their input is respected and valued. Valued input is not achieved on a one-shot basis. Schools will get better quality participation by specifying clearly what is desired and providing information and a process that enables quality participation in decisions.

Educators will continue to have a key role in this process, by virtue of their knowledge, expertise, and high interest level. They will not, in all likelihood, be unchallenged in these areas. It may be difficult for educators to relinquish their control over decision-making. It appears likely that participatory models of decision-making will be around, at least for the immediate future, and that noneducators will expect to be taken seriously when they participate in such models.

Many employers are beginning to understand that the link between education and productivity is much more direct than they had assumed in the past. They are showing a willingness to do more than simply donate money, but are not always certain what to do (Segal and others 1992). Parents, often frustrated by their inability to influence their own children, are looking for help; they may not always know how to ask for it, but many are becoming more aware of the need to be open to help and support. These attitudes may facilitate the establishment of new relationships focused on mutual concern for young people and their role in the community.

Communities need to be ready to support a more gradual transition from the world of school to the world outside school. The community needs to be ready to offer young people a range of experiences that prepare them to leave home and school and to become independent, productive members of the community. Opportunities include mentorships, internships, visitations, and more indepth involvement, such as workshops, children's museums, or laboratories onsite where students can learn.

Some students will be ready before others. Even young children will be able to gain from a wider range of learning experiences with a broader range of adults than those encountered in school and at home. Having experiences with other adults provides children with new understanding about themselves and their relation to a larger world. Such experiences also help young people develop the skills and self-knowledge necessary to make decisions about career paths and to develop the motivation and discipline to fulfill their goals.

In a world where resources for education are likely to remain relatively constant at best, partnerships between schools and other segments of society will be necessary to keep education relevant and exciting for students and to cope with a more diverse and demanding student population. Those partnerships can also help sustain support for public education at a time when the proportion of families with children in the schools is below 25 percent.

6. Schools may be the only place where a sense of genuine community can be developed for young people. They should function more like communities than factories.

As the communities within which schools exist become less robust, educators are faced with (at least) two choices: (1) to lament the decline of support for education from home and community, and wash their hands of the responsibility to educate students who do not come to school with the desired background and attitudes; or (2) to accept that schools may be the only place in the student's life where he or she is safe, valued, and supported, and embark on the process of redesigning schools based on the needs and realities of these students.

The first response leads to a dead end. Schools can do little to directly affect the societal context within which education occurs. The existence of such a response within a school can help explain high levels of teacher frustration. Nothing could be worse than to be unable to teach successfully, and unable to effect the changes necessary to be successful. Stockard and Mayberry (1992), in a review of the research on effective learning environments, describe them as places where "students and teachers have positive feelings about their work setting. High morale appears to bolster the self-confidence of both teachers and students and promote positive attitudes and expectations about teaching and learning ability" (p. 34). Other researchers (Fuller and others 1982, Lanier and Sedlak 1989, Rosenholtz 1989b) have stressed the importance of teacher efficacy—the sense by teachers that they make a difference and that they have some control over their ability to be successful—as an important component of effective instructional environments.

Alternatively, if educators accept that the first response is self-defeating, then they will want to examine whether their own school is a genuine and healthy community for young people. In many cases, what they will discover will be less than totally pleasant. Most schools are organized after one or a combination of three models. The Factory-Management Approach, which was described in chapter 2, has the following major components:

> - The purpose of a public school system is to provide students with training in a common, basic set of academic skills.
> - Teaching is a relatively straightforward process. The situations that teachers face can be anticipated, and appropriate behaviors for handling those situations can be specified in advance.
> - Except for age differences, students are a relatively homogeneous group. Differences in their needs and abilities within age groups are minimal or irrelevant. (Shedd and Bacharach 1991, p. 52)

The Bureaucratic Approach is characterized by its

> emphasis on tailoring whole programs to groups of students.... the key question becomes how much specification is needed to guarantee that students are placed in appropriate channels and moved at appropriate speeds through the system as a whole. (Shedd and Bacharach 1991, p. 56)

The Craft-Workshop Approach represents a third way of thinking about how schools are organized. Shedd and Bacharach describe the assumptions and practices associated with the model:

> The more teaching is perceived as a craft,... the more likely it is that students will be assumed to be sufficiently homogeneous to justify their placement in classes and curricula that are *not* tailored for those with particular needs or abilities (Bacharach and Conley, 1989). Heterogeneity of students' needs and abilities is a manageable problem, according to this line of thinking....
>
> Thus, the craft model is most often associated with the pursuit of some relatively coherent, singular (some would say narrow) notion of excellence, rather than with the pursuit of either efficiency or equity. (pp. 58-59)

Shedd and Bacharach express concern over the effect of these three models on teachers and students:

> Research on schools as organizations provides ample evidence of the apathy, passivity, minimal expectations, avoidance of responsibility, lack of innovation, and (what is most troublesome) impersonal treatment of students/clients that are typically associated with bureaucracies (Anderson, 1968; McNeil, 1986; Goodlad, 1984; Sizer, 1984). (p. 65)

Schools are based on structural designs adopted in an era when students were expected to have their needs for affiliation fulfilled

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primarily through other institutions in the community, including extended family, church, and various social groups. In many cases, these institutions no longer meet these needs for young people. Youth are left to identify with the mass culture created by retailers and the media or, of greater concern, with gangs or cliques that embrace antisocial values.

A large part of the problem is the decreasing presence of positive adult role models in the lives of young people (Stevenson and Stigler 1992). Schools with hundreds of students, where a child can attend several years and be known by only a handful of acquaintances and teachers, create conditions that support student alienation or identification with youth culture of varying types, including gangs. In such settings, young people have few adult role models at exactly the time they are most needed. High school students are left to look to one another for guidance on what it means to be an adult. The older children effectively socialize the younger ones, rather than adults controlling socialization. Television and the media do not help the process much. Young people in large schools have few opportunities to gauge their behavior against socially appropriate yardsticks that adult role models can present.

One strategy is to restore schools to a human scale. Most communities continue to assume bigger is better when designing schools, particularly as students get older. One reason for this infatuation with bigness is an assumed economy of scale. These assumptions should be reexamined. How "economical" is it to house 2,000 students in one building if hundreds of them are dropping out each year due to feelings of alienation and a sense that no one cares about them? Each of them represents not only lost opportunities, but lost resources (in the form of state funds) for the school.

Smaller schools, schools-within-schools, schools in various locations in the community, more adults in schools in various roles, more events at school that have meaning and interest to people in the local community—these are all strategies that can contribute to a stronger sense of genuine community within schools.

Stockard and Mayberry (1992), in a review of studies on school size, conclude that "the most extensive and complete analyses... suggest that students benefit most when they study in smaller classes and in smaller schools." They state that "studies of elementary students suggest that small schools provide a more humanistic learning experience," and that "several studies suggest that students in small high schools are involved in a greater number and variety of activities, assume a greater number of positions of responsibility, are less alienated, and have a greater 'sense of belonging' to the group than students in larger schools."

Extending this sense of pervasive caring and community to the faculty as well is an important consideration, since they will be modeling community through their interactions with each other. Can they develop positive interreliance, identify their common beliefs and values, define what it is about their school as a community that makes it unique or gives it character, and unite to defend the school when it is under attack from external forces? These are behaviors that allow parents and students to understand what it means to be a member of the school community, that help them define their roles and responsibilities, and that enhance their sense of identification and affiliation.

Through such strategies schools may become places where many diverse adults interact with a modest number of students (perhaps 150-300) in ways that allow each student to feel part of some group with meaning, purpose, and direction, and to develop an identity in part by observing the behaviors of competent, healthy adults.

These six new assumptions about schools, schooling, and students illustrate changes that educators may need to make in their underlying assumptions, given changes that have already occurred in society. As these assumptions change, it becomes much more feasible to develop new programs and structures to make the school more responsive to the needs students have for belonging and community. Energy can then be focused primarily on improving student learning rather than being consumed in political battles and in dealing with passive-aggressive behavior from those who see no need for change.

The chapters in part 1 have presented an overview of many provocative ideas regarding the reasons for changing schools. These ideas provide the grounds for thoughtful discussion and analysis of the rationale and need for remaking schools. They offer a series of possible perspectives on these issues, but are not exhaustive in their content or breadth.

There does not appear to be one compelling set of statements that serves to motivate faculties in all schools to perceive a need for fundamental change in education. Individual school sites may find that one or two of the concepts presented here are all the reason needed to change; other sites may feel that none of these factors has great relevance to them. As will be considered in part 4, the process of changing schools appears to hinge on the ability of each school site to construct meaning and responses appropriate for that site. The materials presented here may help school personnel determine whether they need to examine current practice in greater depth. The chapters in part 2 discuss the ways in which the roles of a number of educational constituencies may be changing.

PART 2

CHANGING ROLES AND RESPONSIBILITIES

INTRODUCTION TO PART 2

Large-scale change alters the ways in which people define their roles within an organization. Change also alters the ways in which those outside the organization define their relationship to the organization. Herein lies one of the greatest challenges of restructuring.

Adults develop their roles over time and, in professions such as education, come to equate their personal identity with their role. Periods of rapid change bring about restructured roles. The effect is intensely personal on those whose roles change. The chapters in part 2 are based on the assumption that the roles of *everyone*—those outside as well as those inside schools—will change, both as cause and result of educational restructuring.

During the past fifteen years of educational reform the participants have tended to stand in a large circle and point the finger of blame at whomever is standing next to them. The high school teacher blames the middle school teacher for sending students with inadequate study habits and poor content knowledge. The middle school teacher in turn blames the elementary teacher for not developing basic reading and mathematical skills. The elementary teacher can only point to the parents and lament the lack of preschool preparation for their youngster.

Parents then blame the administrators for allowing shoddy teaching and outdated curriculum. Administrators then blame the universities for producing inadequately trained teachers. Legislators, in their turn, bemoan the quality of test scores. Educators then excoriate first the test-makers for providing biased, irrelevant tests, and then the lawmakers for not providing adequate funding or flexibility to allow schools to succeed. And so it goes year after year, it seems.

The blame game is a ritual that is becoming tiring and frustrating for all who participate in it or observe it. Clearly, responsibility for the success or failure of the public schools cannot be affixed easily and unambiguously. This does not mean that greater accountability for student performance cannot be established, however.

What is occurring on a broad scale is discussion and reconsideration of roles and responsibilities, from the federal government to the classroom and all levels in between. Joseph Murphy (1991) describes the centrality of role redefintion to school restructuring, what he describes as "work redesign":

> One of the key ingredients of school restructuring is a redefinition of the roles and responsibilities of professional staff.... This includes the redesign of work relationships between the superintendent (district office) and

> the principal (school) and between the principal and the teachers. In general, restructuring work signals "a major shift in how people in school systems think about roles and relationships. The shift is from a system characterized by controlling and directing what goes on at the next lower level to guiding and facilitating professionals in their quest for more productive learning opportunities for students" (David, 1989, p. 28). (J. Murphy 1991, p. 22)

These changing roles and responsibilities, and the accompanying changes in accountability that are implied, are examined in the following chapters, first at the broad level of federal and state involvement in education, followed by the local school boards, central administration, principals, and teachers, and finally at the level of parents, community members, and students.

CHAPTER 4

FEDERAL AND STATE GOVERNMENTS

The role of federal and state government in the local educational process has changed significantly during the past three decades, always in the direction of greater involvement and control. Every indication points to a continuation of these trends into the next century.

Long a political backwater, education-related issues, and education budgets in particular, are receiving much more attention from legislators, governors, Congress, and the executive branch of the federal government. Education is less a bipartisan issue than it has been historically. Its movement into the partisan political arena signals its emergence as a topic for significant national policy. As presented in this chapter, the relationship between school districts and other levels of government is changing, perhaps profoundly and permanently.

THE FEDERAL GOVERNMENT

The federal government had very little involvement in public education before the 1960s. At that time, the federal government began to intervene primarily in an attempt to provide equality of opportunity through programs such as Head Start and Follow Through, and equality of achievement through Title I programs.

The traditional "hands-off" role of the federal government toward education may change significantly during the coming decade if the linkage between educational achievement and international economic competitiveness is more firmly established and reinforced. This linkage may provide a more compelling rationale for a heightened federal role in the name of "national security," an area of legitimate federal interest.

A prime example of movement in this direction is the effort to develop a system of national education goals and standards. Although many have interpreted this as the beginning of a national curriculum, it has been argued that such a curriculum exists de facto already, as a result of textbooks, standardized-achievement tests, and college-entrance requirements (Tye 1987).

Federal involvement took a different form in the early 1990s. Led by then-Governor Bill Clinton, the National Governors Association and President Bush agreed upon the notion of national education goals. Six goals were adopted initially. These included the following:

1. All students will start school each day ready to learn.
2. The high school graduation rate will increase by the year 2000 to at least 90 percent.
3. Students will leave grades 4, 8, and 12 with demonstrated competency in challenging subject matter.
4. American students will be first in the world in mathematics and science.
5. Every adult will be literate and will possess the knowledge and skills to compete in a global economy.
6. Every school will be free of drugs and violence and will offer a disciplined environment conducive to learning.

What began as a bipartisan commitment to a vision of a dramatically improved education system quickly evolved into more predictably partisan form after Governor Clinton became President Clinton. He moved quickly to reshape the six goals and the attendant program surrounding them, a highly voluntary effort called America 2000, into a more activist model. America 2000 became Goals 2000, and the emphasis shifted from voluntary adoption of the goals at a local level to the formulation of standards at the national level. This effort was supported by a number of governors and business leaders.

The Clinton Administration was successful in passing legislation in 1994 to authorize Goals 2000 along with a series of activities designed to create national educational standards in a number of subject areas. This standard-setting project was heavily influenced by the success experienced by the National Council of Teachers of Mathematics (NCTM) and the standards they released in 1989. Goals 2000 was to duplicate this effort throughout the curriculum. States were still free to adopt federal standards, create their own, or do neither.

The federal government, through the National Educational Standards and Improvement Council (NESIC), would review the federal and any state or local standards to determine if they met certain quality levels, The entire process was to serve as a sort of "Good Housekeeping seal of approval" for federal, state, and local standards. The National Education Goals Panel (NEGP) would then review the work of NESIC and "certify" the standards. This quasi-voluntary system would not remove local control, but would have greatly enhanced the federal role in setting state and national curriculum and learning standards.

The legislation also sponsored large-scale projects to develop model standards in subject areas where standards did not yet exist. The success of NCTM led standards enthusiasts to assume its work could be replicated. This did not prove to be the case. Standards development quickly became enmeshed in a series of technical and political obstacles. Some of the first reports from groups working on history standards were attacked in the U.S. Senate, and at one point repudiated by a 99-1 vote.

This type of attention was a shock to educators and academics, accustomed to laboring in relative obscurity. What had been backwater pedagogic arguments became the fodder for debate on the floor of the U.S. Congress. Education standards quickly became a symbol of creeping federalism and the intrusion of "big government" into the rights of the states and the lives of individuals.

The controversy surrounding the history standards was followed by problems with the English standards. So difficult was it for experts to agree upon what should be expected in English that the effort was eventually refused additional funding. Following on the heels of these two frustrated projects, NESIC and the National Education Goals Panel never really got off the ground.

The federal government was left casting about for its proper role. Most recent efforts have been in the opposite direction, including efforts to abolish the Department of Education, and to convert entitlement programs, such as Title I, into block grants that the states would administer.

This rapid gyration indicates a period of instability and flux. The federal government will not likely return to its pre-1960 role, given the linkage between education and economic productivity. However, the forces for a strong federal role and those for greater state authority continue their struggle in search of a balance.

If education policy and funding are decentralized, the states stand both to benefit and be greatly challenged by the new balance of policy and program authority such a shift would entail.

The national political scene is far beyond the control of local districts and individual school buildings and is an arena in which most educators are not used to playing. It appears that it, too, will have to be taken into account to an ever greater degree when educators consider how they are to respond to calls for improvement and fundamental change.

STATE GOVERNMENTS

The past two decades have seen a major increase in the willingness of states to use their power over their public education systems (Wirt and Kirst 1989). Ravitch (1990) describes this phenomenon as being "a shift of major proportion [in which] the locus of educational policymaking moved from the federal government and local governments to the states" (p. 48). Mazzoni (1991) summarizes this shift in greater detail:

> In the 1980s, the "entrepreneurial states" made improving schools their principal target for policy innovation (Van Horn, 1989). Their intense and pervasive activism, building on previous decades of more gradual state involvement-notably in the 1970s (Campbell and Mazzoni, 1976; Kirst, 1984; Mitchell, 1988), resulted in the "full-fledged emergence of state educational leadership." (p. 115)

State governments will continue to play the pivotal role in restructuring. While much of the literature on restructuring focuses on the school site and the school district, evidence indicates that for restructuring to succeed educational policy must be consistent and coordinated at the state level (Fuhrman 1993). Smith and O'Day (1991) argue that "what is needed is neither a solely top-down nor bottom-up approach to reform, but a coherent systemic strategy that can combine the energy and professional involvement of the second wave of reforms with a new and challenging state structure to generalize the reforms to all schools within the state." They envision a more proactive role for the states in the process of restructuring—a role that "can set the conditions for change to take place not just in a small handful of schools or for a few children, but in the great majority" (pp. 234-35).

> Most of the current restructuring literature focuses exclusively on the school and district levels of the system. When states are mentioned at all, it is usually in the context of providing waivers from various regulations currently in force.... [D]uring the past 20 years, most states have gradually amassed greater authority and responsibility over their educational systems as their share of the educational budget has risen, as the economy and productivity of the state have been seen to be more and more dependent on its educational system, and as issues of equity and fairness in the distribution of resources and services among districts became an important part of the nation's agenda.
>
> ... [T]he states are in a unique position to provide coherent leadership, resources, and support to the reform efforts in the schools. States not only have the constitutional responsibility for education of our youth, but they are the only level of the system that can influence all parts of the K-12 system: the curriculum and curriculum materials, teacher training and licensure, assessment and accountability. (Smith and O'Day 1991, pp. 245-46)

State government is where the statutory responsibility for education resides, based on the implied powers doctrine of the U.S. Constitution. The role of state government has varied considerably throughout the nation, in terms of the amount of state-versus-local control that existed. State involvement has generally been proportionate to the amount of funding for school districts that comes from state revenues versus local property taxes. As funding authority and responsibility accrue to the state level, so do influence and control over the instructional program and all other aspects of local school districts.

The movement of funding from local to state level may be the largest underlying trigger mechanism for greater state involvement in educational policy generally, and restructuring-oriented legislation particularly. Since 1970 over thirty-five states have revamped their finance systems, many under court order. In essentially every case, the changes have resulted in more funding from the state and less from local property taxes. The goal was to eliminate inequality in funding; the effect was to embolden legislatures to become more activist. Recent examples include the upsurge of charter-school legislation, choice plans, institution of site councils or other participatory-governance models, and greatly enhanced accountability expectations in the form of state assessments and mandatory school-improvement plans.

States have historically satisfied their need to establish standards for local districts through accreditation procedures, implemented by state departments of education or regional accreditation agencies. These procedures usually involve examination of a series of input measures (number of books in the library, minutes devoted to required elements of the instructional program, proper teacher certification for classes taught, and so forth) but do little to ascertain the quality of the outputs of education in forms such as observable or demonstrable student performance.

Although some states have had programs of statewide testing for many years, the majority have not. Testing has been optional and has been conducted at the district level. It was not uncommon for a half-dozen different standardized-achievement tests to be used by different districts throughout a state, thereby making state-level summaries or district-to-district comparisons difficult or impossible.

The reform movement of the 1980s brought about an upsurge in the number of states with formal, mandated programs of statewide achievement testing whose purpose was to provide comparisons of some sort, either to other states, among districts in a state, or even between individual school buildings. In many cases these tests were lawmakers' first systematic attempt to assess educational effectiveness within their state. These programs have been controversial in many places (such as Vermont, Kentucky, and Maryland) and abandoned in others (California, Arizona, and Indiana).

However, in nearly every state new accountability measures for schools are under consideration. Given the reluctance of legislators to fund large programs without some form of accountability, it is interesting that public education has escaped scrutiny for as long as it has. Traditions of local control have contributed to an attitude that student performance in schools was not the concern of the legislature, but of local boards of education. This tradition is gradually being abandoned.

The Education Commission of the States, a nonprofit, nationwide interstate compact comprising forty-nine states and the District of Columbia, has as its primary purpose helping governors, state legislators, and state education officials develop policies to improve the quality of education in their states. Its publication *Exploring Policy Options to Restructure Education* (1991) outlines strategies for state-level policy-makers to follow in their attempts to restructure education. The report states that "the focus must be shifted to student learning outcomes instead of predominantly on the process of schooling." Policy-makers should be actively engaged in establishing a vision "of what students should know and be able to do, and how the education system should work." Six policy categories needing attention by policy-makers are presented with recommendations for the types of policy changes needed:

> I. *Leadership Policies*.... Policies that support and encourage broad-based leadership are needed. Four particular types of policies needed are those that encourage the development of (a) **shared vision and comprehensive strategic plan,** (b) **expectations that roles and responsibilities need to be open to change,** (c) **exemplary practices from which others can learn,** and (d) **waivers to remove barriers.**
>
> II. *Learning Policies*. Current learning policies—those related to curriculum, instruction, assessment and student learning goals—frequently focus on number of hours spent on a subject, amount or type of material to cover in a course, use of specific textbooks, credits earned and attainment of minimum skills and knowledge.
>
> Learning policies need to shift from these focal points to a commitment to: (a) **prepare *all* students,** (b) **set high expectations measured by performance of desired outcomes** and (c) **establish instructional approaches that best teach essential skills.**
>
> III. *Inclusion Policies*. Policies are needed to prevent certain groups from being underserved and to involve people traditionally excluded from significant roles in the education system.
>
> The policy options [must] address the need for (a) **parental and community involvement,** (b) **interagency cooperation** and (c) **business partnerships.**

> IV. *Organizational Policies.* Organizational policies must support greater responsibility and accountability by people at all levels in the system. In particular, more accountability and responsibility for learning by those closest to the students are needed to handle the diversity and complexity of student learning. Shared decision making among representatives of all groups in the school community is important if schools are to reach and implement the best decisions to improve student learning. Accountability processes must be in place to monitor the results of improved teaching and learning practices.
>
> Thus, policies that redefine (a) **decision-making roles** and (b) **accountability** are needed.
>
> V. *Finance Policies.* In the past, regulations and mandates tied to education processes have dominated finance policy. Attention now is being given to transforming finance policy to focus on outcomes and cause change.
>
> Finance policies need to recognize that restructuring involves upfront costs as well as reallocation of resources based first and foremost on higher student outcomes while maintaining equity. Finance policies need to (a) **provide funding for restructuring,** (b) **encourage innovation,** (c) **promote a focus on learning outcomes,** and (d) **address federal involvement.**
>
> VI. *Renewal Policies.* Given the increasingly rapid rate of change, states and districts need policies specifically designed to encourage renewal. Such policies need to support the continual growth and development of individuals and the system itself by effectively bringing the best knowledge, technology and ideas into the system. Barriers to renewal, such as contractual language, must be changed to promote focusing on student achievement. New ways to promote professional growth and recruitment of high-quality teachers and administrators must be identified. There must be an ample number of competent, culturally diverse teachers and administrators.
>
> Renewal policies (a) **promote growth, development and renewal of individuals and groups,** (b) **ensure availability of quality future educators,** and (c) **encourage ongoing evaluation of progress toward the shared vision.** (pp. ii-iv, emphasis in original)

These model policies suggest the newly emerging role of state government as a change agent, standard setter, and judge of the efficacy of public education. At the same time, states retain the ability to set the basic groundrules for the system through means such as funding, teacher licensure, structure of the curriculum, requirements for teacher staff development, and methods by which schools must report their progress to parents and the community.

States provided the impetus for local districts to experiment. On the West Coast, for example, Washington sponsored its "21st Century

Schools" program involving thirty-three sites. Oregon funded the "2020 Schools" program with over 200 schools participating during the five-year program. And California sponsored 300 to 400 restructuring grants worth $6.5 million. All these initiatives were designed to provide seed monies to selected schools in the hope that they would develop innovative programs that can serve as models for other schools.

Examples of other state projects include Arkansas' Restructuring for Higher Order Learning pilot, Indiana's Schools for the 21st Century, New Mexico's 21st Century Schools program, and Utah's site-based management grants. Arizona supported sixteen schools to pursue restructuring efforts. The state provided these schools complete regulatory flexibility and encouraged them to emphasize ungraded classrooms in grades 1 through 8. These schools made changes in the following areas: integration of technology, parental involvement, year-round schooling, and interdisciplinary education. Colorado identified fifty "creativity schools" that are commissioned with promoting innovation and partnerships (National Governors' Association 1991).

The effect of these "R&D" programs has been to create a cadre of schools each having a history of innovation and change. These schools are receptive to new initiatives, and know how to adapt. They can serve as invaluable resources for additional restructuring programs, since they are likely to participate and serve as "lighthouse" schools, examples of how an innovation or structural change can be put into practice. Educators and parents need such examples before they embrace a new educational method.

States will be the key players in educational reform into the next century due to their control of finances, their ability to set general direction for the entire system, their control over accountability measures, their capacity to support innovation and demonstration projects, and, most important, their increasing willingness to use all these mechanisms to influence education policy and practice. If the federal government does devolve control of and resources for federal programs to the states, they will only become that much more powerful in shaping local educational programs.

CHAPTER 5

SCHOOL DISTRICTS

In the U.S., local school districts, about 15,500 in all, are accustomed to operating with relative independence (when compared to educational jurisdictions in other countries). While some are more accountable than others, either to a local board of education, an active community, or a regulatory-minded state department of education, few are prepared for the type of scrutiny to which they are likely to be subjected during the coming decade. Expectations for improved student performance will likely increase, as will involvement by all groups in decision-making.

The implications are profound for all groups that have a role in the delivery of public education. This chapter explores the impact on boards of education and central-office administrators. Subsequent chapters focus on changes at the site level in the roles of principals and teachers, and on changing roles of students, parents, and the broader community.

BOARDS OF EDUCATION

The local board of education is a cherished and unique institution in the American educational system. It embodies the principle of local control of education and facilitates the close relationship that is supposed to exist among home, school, and the community at large. However, the challenges it faces are such that its goals, purposes, procedures, and even its continued existence may be called into question.

The school board was designed initially as a guarantee that the values of the community would be transmitted effectively to the young and that tax monies, raised locally, would be spent properly. The political role of the school board has gone through several transformations. That role has evolved from being an extension of church and local values, to becoming highly political in a partisan sense in the 1890s as cities grew, to reflecting the best of the Progressive movement's ideals for reforming government shortly after the turn of the century when much reform of boards occurred, to becoming increasingly political again in the 1960s and subsequently as it comes under siege by constituencies organized into highly effective interest groups. This evolution continues, as local boards see their power and discretion being challenged from both the top and bottom.

Wirt and Kirst (1989) attribute this "squeeze" on school boards' power to three trends that have occurred during the past twenty years. Parents, who once loyally supported school professionals, now challenge their authority and widely regard them as "failing." Also challenging traditional authority inside the school are teachers, whose success in collective bargaining has further constrained school officials' authority. Finally, according to Wirt and Kirst, the increase in state control over education has been the "most striking feature of state-local relations in the last twenty years" (p. 24).

This politicization of education, combined with the tension between boards and state government, may be leading to a redefinition of the role of board member. From a job that was almost symbolic in nature, board members are now subjected to extreme pressures from organized groups of parents, teachers, taxpayers, and various special-interest groups. Today's board members operate in a highly charged environment in which they are subject to intense criticism and receive little reward for their efforts. Thus it has become more difficult in many cases to attract competent people to a position that has not been coveted historically and seldom is a stepping stone to higher office.

At the same time, the board is expected to provide leadership for change. The impetus and rationale for this change frequently emanate from the state, not the local, level. These often conflicting forces are exacerbating tensions in what Wirt and Kirst (1989) describe as

> an ongoing basic problem in the governance of American schools; that is the tensions between the community's need for school leadership that can lead and be trusted and the same community's desire to have its own will carried out by that leadership. (p. 10)

A board of education increasingly is expected to be sophisticated and knowledgeable and to possess a perspective on education that extends beyond its district's borders. Increasingly it is called upon to influence state policy decisions in areas other than funding. It faces the challenge of enabling schools to adapt to the demands facing them by developing unique responses locally, not viewed as part of the problem by erecting barricades to adaptation. It must attempt to do this in the face of a community that may be suspicious of change in its schools, and generally cynical of government's ability to solve problems.

Given that school sites will probably continue to gain decision-making authority, along with greater accountability, the local board of education might increasingly serve as a "board of directors" that helps set a general direction for the organization, then reviews the plans, goals, and outcomes of the various organizational units. In such a role, a school board would spend less time on administrivia, on detailed reviews of the methods of instruction, and on supervision of decisions that could best be made by the professional administrative staff. In contrast, a school board that operated under the board-of-directors model would pay more attention to the "strategic direction" of the district, to the performance of students, and to the development and periodic review of the knowledge and skills students in the district would be expected to attain at various stages of their education. School sites consistently unable to meet their goals (goals appropriate to their circumstances) would then be held accountable by the "board of directors."

One intriguing notion, following the metaphor of school board as board of directors, is to have the board meet only two times a year, once to review and comment upon proposed goals for the district and individual buildings, and once to assess the degree to which school and district goals were achieved. Obviously, such meetings would have to be longer than regular board meetings, perhaps taking up a Friday evening and all day Saturday. And perhaps there still needs to be a meeting in which the budget is formally reviewed and approved. Most other decisions would be reallocated to management, augmented by the types of community appeal processes that have been developed by most districts.

Such an arrangement might even attract more candidates to school board races. One recent trend has been toward single-issue candidates being elected to school boards. This new model might support candidates with more general interests in education. It might free the superintendent to run the district on something other than a crisis-management basis, and it might change the manner in which organized special-interest groups interact with the board. It could be one more step toward loosening schools from constant oversight, bureaucratic control, and micromanagement, which many identify as a source of organizational inflexibility and resistance to change.

Given the increasing involvement of states in establishing student-performance and school-accountability measures, the role of the local board may move naturally toward issues of internal coordination and quality control. If decision-making continues to be decentralized, as many states are causing to happen by creating school site councils with considerable authority, boards may not mandate so much as coordinate, set parameters, and enforce consequences for a district's failure to achieve performance goals. The board would likely continue, however, to be the screen for local values interfacing with this more state-dominated education system. This could be a very difficult transition for many board members, accustomed to viewing themselves as the final authority. To act as extensions of the will of the state government on the one hand and the desires of school site councils on the other may be a very challenging balancing act for boards of education in many districts throughout the nation.

CENTRAL ADMINISTRATORS

The role of central-office administrators may be more profoundly affected by changing expectations and structures than any other group. Some administrators seem to recognize the enormous challenges they face; others appear not to acknowledge the profound ways in which their role may be altered.

The size of school districts' central administrative staffs soared during the sixties and seventies, particularly in urban areas, where the number of administrators continued to increase even as the number of students decreased. This trend has dramatically reversed itself in the nineties, with many central offices severely curtailed, even gutted. Those who remain in the central office are torn between their control functions, which are ever more difficult to maintain, and their leadership potential, which can maximize their impact on the district but requires changes in role, organizational structure, and personal style.

The administrative structure present today in most school systems has drawn its inspiration from private-sector models and the military, which employ familiar concepts of "line" and "staff" authority to describe positions and relationships within the "chain of command." This structure led to a significant increase in the centralization of authority in school districts in the fifties (a time during which many small districts were consolidated into larger ones), the sixties (with an interruption for many incidents of decentralization and experimentation that tended not to outlast the decade by much), and the seventies (with its emphasis on "back to the basics"). This trend was in step with the basic belief of the scientific management school of thought in economies of scale. It also fit the general notion that educational processes could be directed and controlled in much the same manner as manufacturing processes.

Just as school districts seemed to be mastering the implementation of centralized-authority systems, the rules of the game within the society at large began to shift. As early as 1981, the private sector began to adopt and extol the virtues of decentralized decision-making, worker involvement, and participatory management ("The New Industrial Relations" 1981). Meanwhile, education was putting the final touches on systems such as "teacher-proof curriculum," behavioral objectives, standardized and criterion-referenced tests, and collective bargaining, all of which emphasized the importance of centralized control.

Many central offices are inhabited by people who were socialized into this system of management. They are used to having their ideas and orders carried out. They are not bad people or poor administrators; they simply have a single way of thinking about how an organization should be run in a time when the rules of the game are changing dramatically and new models of effective organizational management are emerging.

Central administrators may be faced with a twofold challenge: (1) redefine their roles so that their contribution to the organization becomes clear in the context of a different notion of educational governance, and (2) develop the skills necessary to succeed in these newly defined roles.

If trends of increasing decentralization coupled with cuts in the central office continue, central administrators may have to possess a new mixture of skills and responsibilities, including the following: assist in the development and implementation of an organizationwide vision and mission; plan and coordinate those aspects of the organization best conducted centrally; facilitate change and all the interactions that surround it; build linkages across institutional boundaries; communicate effectively in a variety of ways; resolve rather than sublimate conflict and disputes; and enhance the efficiency of the organization. These and other responsibilities are explained in greater detail below.

VISIONARIES

One of the unanswered questions of decentralization is: How will people decide to do anything other than what they already know how to do in the absence of a vision of clearly superior alternatives? One of the key roles central-office administrators might occupy in decentralized systems is to help in the development of a vision of vastly improved, or different, educational outcomes and the transformations of the system necessary to achieve these outcomes. This role requires that administrators be aware of current trends and issues in education, to discuss, debate, and analyze on a regular basis key educational issues. Rather than becoming overwhelmed by the administrivia that currently seems to occupy their lives, these people would also be expected to function as educational visionaries. The difficulty of assuming both of these roles simultaneously should not be underestimated.

Perhaps staff meetings might become places where the merits of the latest ideas in education are carefully discussed and critiqued, rather than environments devoted primarily to reactive crisis management. Perhaps notions of reflective practice (Schön 1983, 1989) can be incorporated into the culture of the central office to a greater degree. Perhaps the ability to articulate a vision of education may become a key consideration in the appointment and retention of central administrators.

PLANNERS

Central-office administrators may expect to have more responsibility to guide the organization through systematic-planning activities designed to establish the organization's direction and purpose. In the absence of a common plan that establishes shared vision, mission, and goals, there is little reason for schools to remain in an organization such as a district, other than to obtain certain conveniences of scale.

Identifying a common sense of purpose, or mission, and the unique roles the different elements of the organization have in accomplishing that mission are important skills for central administrators in environments where systematic planning is practiced and institutionalized (Bryson 1988, Bryson and Roering 1988). To conduct such a process successfully requires knowledge of and skill with various planning models and with the interpersonal and political issues that surround planning.

FACILITATORS

To a greater degree, central administrators may become facilitators of change, of planning, of implementation, of dispute resolution, of interactions among organizational entities. Facilitation is the skill of supporting or enabling others to act on their own to solve problems or achieve organizational goals, as opposed to doing it for them (or to them). Facilitation works best when conducted within an environment where organizational goals are known and shared (Rosenholtz 1989a, Saxl and others 1987). Central-office administrators have many opportunities to function in a variety of ways that facilitate change by individuals or school sites toward the achievement of organizational goals.

BOUNDARY SPANNERS

Central-office administrators will continue to be able to move among the organizational units more freely than most of the people assigned to any one unit. They also have more opportunities to interact with a broader cross-section of the community at large. They may be more able to take advantage of the potential presented by the unique insights and opportunities such a perspective provides. They may be critical agents in building political consensus within the community for change, and be the early-warning system that identifies possible problems or reactions that changes in the school are engendering in the community. This knowledge enables them to move the process of change forward in a productive manner.

COMMUNICATORS

The need for central-office administrators to communicate effectively, through the written and spoken word, seems likely to increase. While it is already an important ability for some central administrators, it may become even more important as these roles involve greater communication of a vision, resolution of problems, spanning of boundaries, and many of the skills outlined above. Aspiring leaders may need to demonstrate their competence and knowledge through verbal and written forms of communication as one of the key ways by which others may judge their fitness to lead.

DISPUTE RESOLVERS

Rather than mandating behaviors and then manipulating people to create desired outcomes, central-office administrators may be called upon to mediate among different units of the organization where friction exists, between the organization and the outside world, and within individual units of the organization. They may take on the role of "objective" external arbitrator, rather than that of a player with a clear vested interest.

Particularly with the development of shared decision-making and participatory styles of management, increased conflict at individual work sites can be expected, as people begin to interact with one another around issues of power and resource acquisition and allocation. It is likely the organization will need people who can help move the process of self-governance along. This role, akin to an organization developer, exists now in a few districts. It may be needed in many more districts in the immediate future if current trends toward greater involvement and empowerment continue.

EFFICIENCY ENHANCERS

Since central-office administrators have presided over the establishment of a bureaucracy, there have been few incentives for them to make their organizations more efficient. In a bureaucracy, more attention may be given to empire building than to efficiency. Education, with its lack of clear outcome measures, is vulnerable to self-justifying and self-perpetuating organizational behaviors. This can lead to decreased efficiency and loss of organizational focus.

Since it is hard to envision a scenario in which the amount of inflation-adjusted funding available to schools increases significantly during the coming decade, it is likely pressure will continue on central administrators to improve efficiency so that resources can be freed up and transferred to the school site and the classroom. Not only does this streamlined efficiency mean the loss of jobs from central offices, but it means that fewer resources will be available for performing many of the district's functions. A central administrator in this role would have to be an expert on alternative forms of service delivery and organizational analysis in order to present options for making the bureaucracy less cumbersome while ensuring that the needs of school sites are met.

COORDINATORS

As suggested earlier, the different levels of the organization, such as elementary, middle, and high schools, need to develop some method of coordinating their efforts if school districts attempt to move toward integrated outcomes that are the result of cumulative educational experiences from kindergarten through grade 12, as a number of states are now beginning to legislate. In many, perhaps most, districts there is precious little coordination currently among different levels.

Central-office administrators can expect to be challenged to maintain a balance between the needs for some order and internal consistency, on the one hand, and for individuality and adaptation for school sites on the other. Decentralized decision-making tends to pull organizations apart, while cumulative outcomes and accountability for achieving them necessitates cooperation across levels and school sites. Such a balance will be difficult to strike.

STANDARD SETTERS

One of the elements driving coordination is the need to have standards for student learning. Central-office administrators can play a key role in the identification of standards, stated in the form of key learner knowledge and skills, for which different levels (elementary, middle, high school, special education) will be responsible.

Once these standards are set, central administrators are in the ticklish position of assessing the degree to which the standards are met. While most districts currently have testing programs of one form or another, many forces tend to make it as difficult as possible for this information to be used to assess the performance of individual buildings against any preestablished standard or outcome. As state standards are established, it may become easier (or at least possible) for the public to measure the performance of schools against those standards. Given the increasing demands of state legislatures for accountability and a general public perception that schools are not "getting the job done," it seems likely that accountability will be measured in more specific terms than current measures. Standardized-achievement tests, for instance, have lost some credibility in part because of what has been called the "Lake Wobegon Effect," where all the children are above average.

Because it makes little sense for each school to develop its own program of accountability independent from all other schools and from the state's program, the central office is in the position of coordinating and integrating accountability methods and standards, with the understanding that such programs might need to be adapted to the special or unique goals of each school. Sophisticated local assessment systems can collect data on student performance that allow better decisions to be made locally about what programs to continue and increase, and which to redesign or abandon. State assessment programs are unlikely to yield such data. Central-office administrators are uniquely situated to play a key role in developing and implementing districtwide accountability programs and information systems that are tools for school improvement.

It is this sort of justification of the role of central-office administrators that can create greater legitimacy for the allocation of resources to central-office positions and help stop the evacuation of central offices taking place in many districts. The individuals who fill the positions can benefit by employing a new set of skills and attitudes as they define their relation to school sites. The previous hierarchical model of management may be evolving to include elements of a matrix style, where various decision-making "nodes" in the organization report to or collaborate with other nodes. The nodes relate to each other sometimes as equals, sometimes in subordinate-superordinate relationships, sometimes with elements of both, depending on the specific task or responsibility. The central office is one more node, with its own areas of authority and responsibility, but it is not necessarily the top of the pyramid to which all information flows and from which all decisions emanate.

This description of the newly emerging roles and duties of central-office administrators is very similar to the one offered in a report issued by the National LEADership Network Study Group on Restructuring Schools. This group was composed of representatives from projects in the national Leadership for Educational Administration Development network of federally funded programs to improve educational-leadership skills. The report described this new role as follows:

> Restructuring should entail changes in central offices as well as school buildings. District staff need to stress facilitation and enablement and de-emphasize control and compliance. Central offices might retain small troubleshooting staffs, competent in the specialties of plant management, personnel and bargaining, law, transportation, and other technical subjects, who would be detailed to work in trouble spots with administrators in charge. Field administrators might rotate on occasion into these slots, where they would develop and use expertise in the subject matter as well as in facilitation of problems of site administrators. (Mojkowski and Bamberger 1991, p. 51)

A number of urban districts have undertaken reorganizations and downsizing of their central offices to try to accomplish some of the transformation of roles described above. The success of these efforts, which have been arduous, is undetermined at the moment (Ayers 1991, Clinchy 1989, Rebarber 1992).

Considerable power will continue to reside in the central office for the foreseeable future, in part because superintendents will still have relatively broad discretionary power regardless of what authority states and local sites might accrue. Control over budget and daily operational decisions, access to the local board and to state policy-makers and implementers, and the ability to span boundaries between the district and the community will enable superintendents to retain central control.

Some districts have seen conflict already between superintendents and individual schools over operational decisions. To date, the superintendents have won. States have also challenged local boards and superintendents. Here the record is less clear. In some cases the state has moved to replace boards and superintendents. These occurrences are rare and taken only after all other options are exhausted.

How will the superintendent use this power? The potential for symbolic leadership for a superintendent is great when many people in a district are participating in decision-making. They look for guidance and help in putting their decisions into a broader context. A superintendent who provides visible, clear, goal-oriented leadership can help galvanize participatory decision-making in ways that take the district in a consistent direction. The superintendent will be challenged to enlist support for her or his agenda, not merely to articulate and mandate it.

Although central-office administrators have been somewhat marginalized in discussions of school reform and state-generated legislation, they continue to occupy a key role. They stand challenged to adapt, to develop new abilities, and to change some of their conceptions of power and leadership. It is a difficult challenge for those used to being in charge.

CHAPTER 6

SCHOOL SITES

Substantive change in education doesn't occur or doesn't have much of an impact without changes in the roles of those at the school site. Teachers, students, and school-site administrators create the meaning of education through their daily decisions and actions. Roles define and direct those decisions and actions within schools. Restructuring means changing the roles adults and children occupy in schools. Corbett (1991) contends that "a social system's structure is its pattern of rules, roles and relationships. Restructuring, then, represents changes in these social relationships." Such changes will be difficult for all involved, particularly adults at or beyond midcareer who are now being asked to radically reconceptualize their roles. As this chapter indicates, classical bureaucratic roles may change into relationships based on collaboration, colleagueship, facilitative behaviors, and community membership.

PRINCIPALS

In schools where considerable effort has been devoted to restructuring, the role of the principal is quite often very different from the role described in the effective-schools research, where the principal was characterized as a strong, forceful leader who provided the impetus for change and improvement within the school by dint of personality alone (Clark, Lotto, and Astuto 1984; Murphy 1983; Purkey and Smith 1983). Principals in restructuring schools demonstrate skills similar to those described previously for central-office personnel. They lead through and with others, not by dictating but by facilitating (Goldman, Dunlap, and Conley 1993; Louis 1992; Prestine 1991). Cushman's (1992) discussion of the ways in which principals in the Coalition of Essential Schools exercise power highlights the movement away from some of the tenets of the effective-schools research:

> Researchers within the Coalition of Essential Schools argue... that the Effective Schools model is less well suited for schools moving away from the existing system. They see that system as flawed, along with the

convention of one strong leader it depends on. (p. 2)

An outline of what this emerging role of principal might look like can be gleaned from a study of Oregon's "2020 schools" (Goldman, Dunlap, and Conley 1991; D. Conley, March 1991). The 2020 program (named after the number that the bill creating the program was assigned as it passed through the legislature) was formally titled the "School Improvement and Professional Development Act." Its goal was to create numerous model sites where teachers and administrators together develop site-based programs of staff development and program development that result in improved educational practices.

These schools were selected by the state through a competitive process and provided additional money to enhance the professional growth and development of staff while they experimented with new methods of education and leadership. Each school was required to have a site committee with substantial responsibility for developing and implementing the school's program of improvement. The site committee was responsible for developing "a plan to improve the professional growth and career opportunities of a school's faculty" and to improve its instructional program; that plan "may reflect efforts to explore initiatives in shared decision-making" (Oregon Department of Education 1990, p. 4). These schools served as "laboratories" where insight was gained into the emerging role of the principal. A summary of what effective principals are doing in some of these schools follows.

BEHAVIORS OF PRINCIPALS IN SCHOOLS UNDERGOING CHANGE

A clear sense of purpose linked to the vision. Principals' actions and decisions are guided by a vision of education. Vision may reside in the principal as an individual, but more frequently it is created jointly with the staff; in all cases this vision is clearly and repeatedly articulated within the school. All important programmatic decisions are linked to the vision. It serves as a screen through which new ideas, proposals, and programs are viewed and evaluated.

The use of data to inform decisions and create vision. Data are used to develop and implement this vision. These data take many forms, from profiles of the school's performance on dimensions such as student achievement and attendance, to student discipline records and surveys of parents and students, along with information on the latest educational and societal trends gleaned from journals, books, and other sources.

Principals frequently take the role of disseminators of information. They attend conferences, read voraciously, discuss ideas with colleagues, copy articles, and distribute them to the faculty. They encourage an examination of current practices and assumptions and the development of new ideas.

Analysis of data provides a base upon which discussions take place and helps move decision-making about educational goals from the level of anecdote and unquestioned beliefs to examination of current assumptions and practices. This has the effect of helping to neutralize some of the political factions within the school that can be counted on to oppose any substantive change. The appeal to objective evidence also deflects charges that the process is being manipulated by the principal to produce some predetermined outcome.

Allocation of resources consistent with the vision. Having developed and agreed upon a common focus or purpose in the form of a vision, principals facilitate the process by allocating resources in a way that moves the school toward its goals. This replaces a process of resource allocation dominated by political considerations, what is commonly referred to as the "squeaky wheel" method of management (D. Conley, March 1991).

These principals allocate resources such as money, space, scheduling, and personnel in ways that help achieve the vision. These actions are not perceived as being "top-down" when the staff has developed and endorsed a mission. In 2020 schools, principals have created common prep times, team meeting times, and opportunities for peer observations. They have moved personnel around in school buildings to create space for new programs, and they have reallocated staffing to support specific 2020 goals.

Creation of new decision-making structures. As facilitators, principals have to work with existing decision-making structures, recognizing their limitations. What many principals have chosen to do, rather than confront these existing structures and attempt to assign new duties to them, is to create entirely new structures and allow new leaders to emerge. Principals are not necessarily "in control" of this process. In other words, having created a new leadership structure, they are willing to stand back and let people make decisions, and to relinquish personal control to a significant degree. The following quote from a principal in the study illustrates both the excitement and difficulty of letting go:

> I used to work more at getting people to go into positions when I thought they were ready. Now, people choose their own goals and move through the positions and committees with less direction from me. The current group, for example, is not a team I would have chosen for school leadership, but they are working hard to become as informed as they can be—the best informed in the building—and they are doing fine.

> I am more comfortable working with whomever comes along. Part of that is the maturity of the process, part is the maturity of the staff as a group, and part of that is me. I've developed. Now I talk with people about the difference between being congenial and being collegial. (D. Conley, March 1991, p. 40)

Another principal described the interaction with these new leaders:

> We try to get them to do the things they say they want to do. Our role has shifted. We're not doing it. We don't own the task any more. We need to constantly remind them because this is new behavior for them. You remind them they have money to manage, suggesting, not telling them, how they might go about this. There's a lot of coaching that goes on with the committees. (D. Conley, March 1991, p. 40)

Provision of information to teachers. Teachers have difficulty being involved in decision-making in any meaningful way if they do not have the information necessary to inform them of their options and the implications of their actions. Principals in this study provided information to teachers that enabled them to make decisions about budget, staffing, building schedules, and the curricular program.

Principals also provide information about how the school functions internally, how money is allocated, what resources are available, and how decisions are made regarding staffing or class load. By moving these issues into the public light, suspicion is decreased. At the same time, the quality of decisions made by teachers is enhanced when they can see the impact of their decisions on other aspects of the school or can suggest solutions that acknowledge the complexity of the institution.

Less direct leadership, more support of teachers. Part of the process of "letting go" required principals to learn how to support decision-making from the sideline. Sometimes this requires them simply to remain silent in a meeting; other times it means trusting teachers to make good decisions and allowing them to do so. This is not easy, even for those principals who are committed to changing. A quote from one principal indicates how specifically these issues were dealt with by this individual:

> I try to do whatever I can do to remove barriers to successful implementation. I'm constantly asking ways to do this. Every agenda of every meeting has [an agenda item from me] on barriers [to implementation]. I also refuse to be deferred to as the principal. If someone wants clarification, o.k., but otherwise I say, "You had probably better talk to the chair of the committee about that." I try to redirect the question so it does not come to me but to the responsible person or committee. That is important. Ego can impede the outcomes. You have to be ready to let go, and keep on letting go, so others know that they are really in charge of something and really take responsibility for it. (D. Conley, March 1991, p. 41)

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Prestine (1991) reached similar conclusions in a study of four schools participating in the Coalition of Essential Schools. She states that "significant new demands on principals in schools attempting essential schools restructuring" fell into three categories: sharing power, participation without domination, and facilitation. As schools in this study began planning to restructure, there were clear expectations for the role of principal to change.

Teachers in the schools Prestine observed and teachers in Oregon's 2020 schools appear to share many of the same perceptions of the behaviors principals must demonstrate to facilitate change.

CHALLENGES OF ROLE TRANSITION

The preceding section illustrates some of the ways in which reformist principals attempt to facilitate rather than control change in their buildings. This new way of doing business can be fraught with difficulties for many principals, in part because they were selected for their ability to be "strong leaders," which has been interpreted to mean someone who is able to impose his or her will on others. Essentially, these people are being asked to modify their personalities. To shift one's conception of the exercise of power and influence 180 degrees is a tremendously difficult thing to expect of any adult, particularly of those who believe they are currently doing a competent job and see little reason to change.

A second challenge inherent in this role transition derives from the likelihood that principals will bear the brunt of responsibility for the achievement of goals as schools become more accountable for student performance. Many may worry about ending up in the position of a manager of a baseball team that is losing; in most cases, the manager goes and the players stay. Those principals who adapt their behavior to the changing rules may see the advantages of working through others and may reap considerable reward. This outcome, however, is far from guaranteed.

TEACHERS

When restructuring is attempted with some success, the role of teacher also undergoes redefinition. Schools that define themselves as being involved in restructuring generally operate in ways that tend to "professionalize" the role of teacher (Lieberman and Miller 1990). Teachers are often charged with making many more decisions and are given the wherewithal to implement programs based on these decisions.

They spend more time discussing the goals, purposes, and methods of education as colleagues, and they interact around issues of instruction to a greater degree.

Rosenholtz's (1989a) study of teachers' workplace concluded that a number of factors were associated with schools where teachers were more effective, more satisfied, and more amenable to change and improvement. These factors included high consensus on shared goals, significant teacher collaboration, ample opportunity for teacher growth and learning along with an abundant spirit of continuous improvement, some certainty or agreement about what constitutes effective practice, and a strong sense of the possible, along with a commitment to make things happen and to solve problems. When teachers have an organizational environment with these characteristics, changes in the way they approach teaching are much more possible and likely.

It appears to be almost impossible for teachers to transform their teaching in isolation or in the context of the current factory/bureaucratic model of schooling (Lieberman 1990, Lieberman and McLaughlin 1992, Little 1982). Obviously, structural changes are needed to allow teachers to work together and to have adequate time to develop and practice new skills. At the same time, teachers need structures that provide opportunities to become more involved in teams of varying compositions—sometimes with other teachers, perhaps with paraprofessionals of differing levels of technical skill, often with volunteers from the business community as well as the home—if they are to develop the interaction patterns that accompany collegial environments.

Rosenholtz (1989a) makes clear that in schools that are meeting the needs of a wide range of youngsters, teachers cannot do whatever they define personally as effective teaching and operate in isolation from their peers. Opening up the classroom and the instructional process may not be easy for many teachers.

If teachers are to have greater decision-making authority, they will need to be able to use human-relations skills such as communication, negotiation, consensus, goal-setting, and conflict resolution to a greater degree than they do currently. The old norm of isolation, which allowed a teacher to reject new ideas and decisions, is challenged by such behaviors (Rosenholtz 1989b, Rosenholtz and Kyle 1984). The development of more professional environments will support or necessitate greater teacher discussion about what constitutes effective practice and what practices are detrimental to children.

Administrators have an important role to play in this process; they help to implement the decisions of the group and assist in overcoming obstacles mounted by individuals by referring to the decisions of the whole, rather than to the dictates of the administration. They help teachers deal with situations that are beyond their control or that are particularly complex or conflict-laden, but attempt to do so without taking total control. They enable teachers to continue to develop necessary group-process skills successfully (D. Conley, March 1991).

When restructuring efforts are successful in helping teachers develop new roles, the organizational structure changes in ways that support teachers' ability to develop a broader perspective on their role in the organization (David 1989, 1991; Lieberman, May 1988). As they begin to make more complex decisions, they come to grips with the implications these decisions have for the organization as a whole. They deal with issues such as the allocation of resources within the system, legal and contractual constraints, the political effects of their decisions, and the reactions of their colleagues (Goldman, Dunlap, and Conley 1991). For many teachers this broader view is new and somewhat uncomfortable. What seemed so simple before suddenly becomes very complex. This challenges teachers to remain involved, to address the ramifications of their decisions, and to direct decision-making to issues that have the potential to have a positive impact on student learning.

Along with greater authority over learning conditions can be expected to come greater accountability for results. Such a change can cause considerable consternation among teachers, accustomed to closing their doors and doing more or less what they please without responsibility for any particular outcomes. Meadows (1990) points out the conflict that exists as decision-making responsibility is shared more widely:

> I have discovered that, as long as decisions are successful, a leader runs little risk in sharing decision making. However, if a decision proves unsuccessful, the leader will be held accountable; the leader, not the group, must accept the blame for failure. (pp. 545-46).

If teachers come to accept more authority for decisions that affect student learning, they will have to be prepared for increased expectations that these decisions will result in improved learning. This linkage between decision-making authority and outcomes does not yet exist in many of the initial attempts at shared decision-making. If such linkages begin to develop, the ways in which teachers interact with one another and how they define their roles will change significantly.

The partnership between teacher and parent also changes in the context of a restructured school (Davies 1991b; Henderson 1987; Moses and Whitaker 1990; Oakes and Lipton 1990). Many schools limit the role of parents today to doing what they are told to do by the teacher, who wants parents to support whatever activities and behavior system the teacher may have established for the class and for each student. While parental support for teacher decisions is important, there are additional dimensions to this relationship that develop or are enhanced as schools move toward partnership models.

In effective schools, parents may become partners in more meaningful ways (Mortimore and Sammons 1987). To facilitate this partnership, teachers share more information with parents on what the teacher is trying to accomplish. The teacher's expectations for the parent are spelled out more clearly. In addition, the teacher solicits information on the student's interests, personality, and other factors that might affect performance. The ritualistic parent-teacher conference may be replaced with more genuine interactions, perhaps in the home of the student, that lead to an exchange of perceptions and a greater understanding of the goals of each party (Love 1989). A true partnership requires teachers to be willing to modify their instruction to some degree based on the realities of a child's support system and to validate and respond to the views and concerns of parents. Parents, and students, have additional implied responsibilities that will be discussed in more detail. The changing roles of parents are the subject of chapter 7, and the responsibilities of the student are considered next.

STUDENTS

Sizer (1991) has described the role of the student as worker and the teacher as coach. In the restructuring school, students undergo a role transition—it may be implied or stated explicitly—from passive to active participants in their own learning (Beane 1991, Brooks 1990, Brophy 1992, Leinhardt 1992, Newmann 1991a). This shift will not be easy, particularly for those students who have already spent many years in the system and have developed successful coping strategies. Newmann discusses this challenge:

> Teachers face the persistent difficulty of engaging students in serious academic work in schools as we know them. Except for a few highly motivated students, most young people complete school only as a ritual. This pervasive disengagement creates massive problems of crowd control for educators and wastes the time of students and staff members alike. (1991a, p. 459)

To engage students more effectively, Newmann states,

> more time will be needed for teachers to communicate with individual students through sustained talk and writing and for students to talk with one another. Substantive conversation also entails major shifts in the roles of teachers and students. Teachers will function more as mentors and

> coaches, less as depositories of static knowledge to be reproduced. Students will function more as constructors and producers of knowledge. They will rely on teachers for help, but they will not be mere absorbers or consumers of everything the teacher says. Students will also have to take on the new roles of seeking help from and giving help to one another as they learn. (p. 462)

To become actively engaged in learning, students need to have some control over and input into what they learn. They need opportunities to make more decisions about their learning. They need structures that ensure that they accept the consequences of those decisions. With choice comes accountability. The extensive use of personal-learner goals, coupled with public assessments and demonstrations, is one strategy that helps promote this linkage. Such a method can create personal accountability in front of parents, peers, teachers, and community members. This removes the anonymity most students are able to maintain in schools today. In addition, students need opportunities to collaborate, to work together to solve real problems, to demonstrate what Newmann (1991a) calls "authentic student achievement." To do so, students will need to exercise "some control over the pace and procedures of learning; over opportunities to ask questions and to study topics deemed important; and over constructing and producing knowledge in one's own language, rather than merely reproducing the language of others."

Students who are now drifting through school will need to be challenged to become much more aware of their personal strengths and weaknesses. They will have to be willing to accept, even demand, formative feedback that enables them to assess their skills more accurately against any of a number of external standards. They will need to be willing to set longer term goals, longer than "pass the test," and to think about how the skills they are choosing to develop relate to one another. They will start to think about the relationship between what they are doing in school and what they will be doing when they leave school. They will begin to think of their behaviors in terms of their life goals. And having made these linkages, they will have to be willing to work much harder and produce much higher quality work than they do currently. Their expectations of themselves will need to rise, along with teachers' and parents' expectations of them.

College-bound students will be called upon to reexamine the cynical transactional relationship they frequently develop with teachers, counselors, and administrators, wherein every activity is judged according to its utility as a means to college admission. Newmann (1991a) describes the reaction to restructuring of those who may be on the college-bound track: "Teachers, parents, and students who have experienced only the conventional version of education—especially those who have been successful—cling tenaciously to it, even when they have the opportunity to make substantial changes."

While these students surely should be encouraged to pursue their ambitions, they should also be involved in educational experiences that enable them to learn more about themselves; they, too, need to participate actively in constructing their own learning in addition to following the advice of teachers and counselors. They should be able to take courses that are challenging and that help them develop their intellect, even if there is risk of not getting an "A." They should see experiences in the world of work as valuable. Thus they would welcome opportunities like internships, apprenticeships, shadowing experiences, and other chances to understand how what they are learning relates to the world they are entering, to see that cooperative teamwork is as important as individual achievement, to understand what quality work is, and to be more aware of the need to think critically, solve problems, and develop skills to make themselves successful lifelong learners.

These are all skills identified by many as being associated with success in the workplace of the future. College-bound students may inadvertently neglect the development of these skills if they remain in an educational environment that stresses individual achievement and conformity to teacher-structured and -initiated activities as the primary criteria of success.

Furthermore, high school students in particular can benefit from a learning environment that causes them to reassess the appropriateness of holding a job that has no relation to their program of study while attending school full time. The jobs, often for minimum wages, offer little future for most students, while reducing substantially the time they have to devote to school work. If schools become more successful in offering students a range of experiences in the world of work, these experiences, though not necessarily paid positions, could help displace students' short-term needs for money, if they were structured so that they ultimately led to higher paying jobs for students, particularly during summers and after graduation.

The role of principal, teacher, and student changes in schools where restructuring is attempted. The ultimate effect of these changes of student learning is still to be determined, since few schools have gotten to a point where the roles described here have been successfully institutionalized on a widespread basis for enough time to enable the results to be assessed systematically. Anecdotal evidence, particularly from teachers and students, is encouraging (Hayes 1992, Meier 1987, Ratzki and

Fisher 1989/1990, Richmond 1974), along with studies of learning environments (Stockard and Mayberry 1992) and particular teaching techniques that involve students actively and allow them to make choices (Joyce, Showers, and Rolheiser-Bennett 1987; Rothman, October 30, 1991; Slavin 1988, 1991).

CHAPTER 7

PARENTS AND THE COMMUNITY

A school cannot educate children in isolation from the community in which it exists. As forces cause educators to move from thinking of their school as a "closed system" that is not affected much by the world that surrounds it toward more inclusive "open systems" conceptions that acknowledge the effects the external environment has on learning, the role of parents and of the larger community as well changes substantially. Many schools are already moving actively to rethink the ways in which they involve parents and community members. This chapter provides a rationale for such changes and describes these new roles and relationships.

PARENTS

Over time the responsibility for educating the young has gradually been transferred from the parent, the extended family, and the community at large to professional educators, what Seeley (1989) has called the "delegation model" of education. The structure of public education has evolved over the past 150 years based on much the same rationale used to develop common fire, police, sanitation, and public-welfare systems. In many communities, citizens have come to believe that once government creates a system, they have only to pay taxes and hold elected officials accountable for the efficient and effective delivery of the services. Well-trained professionals are to make the day-to-day technical decisions that drive the system and ensure provision of high-quality services to all. Individuals have few responsibilities for the collective good in this model.

The limits of this delegation model seem to have been reached in many areas other than education. Police protection, for example, once relied on strong neighborhoods that enforced behavioral norms for most residents. With the breakdown of such neighborhoods and the social institutions associated with them, local police departments have discovered the same thing that educators have: The safety of the community cannot be delegated to a few trained professionals who are not a part of the neighborhood or community.

Many rural communities function in ways that acknowledge the importance and necessity of community involvement in and responsibility for civic survival, often because these communities have no other alternative. Volunteer fire departments are only one example of how lay people acknowledge they must participate actively in the maintenance of their community. Interdependence and a strong sense of personal responsibility are essential to civic viability.

One other example of how the delegation model has begun to be replaced or redefined is in the arena of health. Not so long ago, many people would ascribe responsibility for their health to their doctor. In essence, the doctor's job was to make them well when they were ill or injured. In between these visits, the individual had few responsibilities for maintaining well-being. This has changed. Now more people accept greater personal responsibility to be knowledgeable about health-related behaviors and to alter their behaviors based on the information they have. In this conception of individual wellness, doctors are seen more often as resources who help confirm or question the individual's own tentative diagnosis, who have access to specialized knowledge and equipment, and who deal with extraordinary cases or situations where expert training and knowledge are truly needed.

Health is based on personal decisions; doctors are there to help when something goes wrong or when support is needed. They are not solely (or, in some cases, even primarily) responsible for personal wellness. In fact, many people are becoming much more comfortable questioning a doctor's diagnosis or seeking additional information themselves. The model of doctor as all-knowing and the patient as relatively helpless recipient of professional treatment is evolving as patients become more knowledgeable and willing to question physicians.

Public education is nowhere near this point of having parents understand their responsibility to participate in their child's education, or to be knowledgeable about effective methods of learning. When a principal or teacher contacts a parent regarding a problem his or her child may be having, it is not unusual for the parent to reply, "You're the educator. You deal with the problem." This attitude is very frustrating to educators, yet they may have contributed inadvertently to its development.

The public-school system has put into place over the past fifty years a series of protective buffers, including teacher-tenure laws, restricted access to classrooms, due process for teachers, the tendency of teachers (especially in urban areas) to live outside the communities in which they teach, the emergence of the principal (and the central office) as a barrier and buffer between teachers and parents, and a whole series of measures to "professionalize" teaching, many of which also served to enlarge the gap between parents and teachers.

Since many parents have in essence relinquished the education of their children to professional educators, and since the schools have put in place many of the barriers to parental involvement, only the schools can effectively begin the process of reaching out (although some legislatures are mandating more parent involvement). Educators can provide information to and foster communication with parents, as well as involve them in setting goals for their children that the school and home can jointly attempt to achieve.

Student learning will be enhanced if parents see education as a shared responsibility (Henderson 1987, Stevenson and Stigler 1992, Watson and others 1983). Just as the health-care community has come to emphasize the importance of the patient as a partner in maintaining personal health, the educational process will benefit from increased parent and community involvement.

Parents who devote more time to their children's education—not just helping them do their homework—have a positive impact on the children's attitude toward school and their subsequent achievement (Stevenson and Stigler 1992). However, the ways in which parents devote time to education are important, and schools often do not utilize parent time very effectively. In many places, parents are invited to school to be told what to do, to be entertained, or to contribute money.

This time and involvement could be used more effectively to provide parents many more opportunities to participate in their child's education. Here are some examples of possibilities: coming to school to see their children demonstrate their skills; assisting in the development of student projects; receiving briefings on the status of school goals and student performance; assisting in decision-making and goal-setting; and coming to perceive the school as a focal point for their social activities and as a center of newly developing conceptions of community. These methods of involvement can be made as applicable in the innercity as in the suburbs with adequate attention to the different contexts and challenges of each environment.

Several examples of ways in which the role of parents can be redefined follow.

Becoming knowledgeable about learner outcomes. As schools move to programs designed around the things a child can do and around the performance standards that specify required knowledge and skills, parents need to know what these standards are and how they will be measured. They will then be in a position to review their own child's work to determine how well he or she is proceeding toward achieving the standard. This knowledge helps the parents set more appropriate expectations for their child: For example, should the child work harder in certain areas, going beyond merely completing homework assignments?

When parents have a standard and examples of acceptable work against which to review their own child's work, or attend a demonstration by their child, they are able to determine the level of performance their child has reached. Such knowledge is better than a letter grade, since it allows comparison not just with other children, but with an absolute standard as well. However, parents must be included in the development of the standards and given ample opportunity to understand them in concrete terms.

Setting learning goals with the teacher and child. Education that is adapted to the child's needs and interests allows parents to have a means to participate more actively in the learning process. For example, they can be involved in the development of supplemental learning activities that support achievement of the chosen learner goals. Use of such goals is one strategy that creates a focus for dialogue among parents, student, and teacher. The goals build on the child's interests, while allowing the teacher to keep the activities directed toward achieving the required performance standards.

Communicating with teachers about child's interests and learning style. Most parents feel comfortable talking about their children's interests. This topic provides a natural starting point for the development of a helping, supporting relationship, but only if the teacher is knowledgeable enough about learning theory to describe how each child learns, and is capable of showing how the teacher will incorporate or build upon these interests and strengths.

The teacher can help parents become more confident observers and diagnosticians of their own chidren. They can be taught about learning styles (and learning disabilities), and they can use their understanding to communicate with teachers using the "jargon" of education when appropriate, or at least not being intimidated by it when it is used. Through this interaction, they will become more sophisticated in their knowledge of the learning process generally, and of their child's strengths and weaknesses as a learner specifically.

Becoming involved in site-based decision-making. Many new opportunities for parents to be involved in decision-making at the school site are being created. For these processes to work effectively, parents will need to be provided enough information to understand their role, responsibilities, and authority, and to form opinions on crucial issues.

Parent involvement of this type has tended to be carefully controlled by educators (Malen, Ogawa, and Kranz 1990; Malen and Ogawa 1988). This type of controlled involvement results in many talented, conscientious parents occupying multiple roles within the school. These individuals should be commended for their dedication and commitment, and their participation in decision-making bodies should be encouraged, if only for the continuity they bring. At the same time, the challenge is to involve a cross-section of the community in decisions. This requires school personnel to reach out to the community and include some individuals who may ask difficult questions or bring up issues the school would rather not think about. However, it is just this process that is the most valuable aspect of community participation in decisions.

Advocating and supporting change in schools. Most parents are unaware of what is occurring in their child's classroom, or of the need to change education to bring it into the twenty-first century sometime very soon. The first reaction to change by many parents is to be concerned or opposed. They may have little faith in educators, who they view as being subject to fads and too willing to experiment on their children. They may also be concerned that the schools will change in ways that make the parents unable to help their child or to understand what is being taught or learned in school. Parents are familiar with school; they all have memories of it. Any change that runs counter to these memories (or assumptions) may be threatening.

Such attitudes can be overcome only by providing parents with much more of the information they need to be aware that change in education is necessary. Educators are often reluctant to offer such information, since it implies that schools are doing something wrong. If parents are to become advocates, they first need to be given the opportunity to become knowledgeable, both about the need for change as well as the options available to the school. At the very least, educators need to do a much better job of reminding parents that almost every other aspect of society is changing. Most parents witness this in their workplace or their daily interactions. They know the world is changing. School personnel should not avoid their responsibility to help parents make the linkages between changes in society and requisite changes in schooling.

For their part, parents must be willing to spend the time necessary to understand the myriad ways that education must be redesigned if it is to adapt to the changes that have already taken place in the world that surrounds schools. Given the demands on parents' time currently, this is a significant challenge for all involved.

Schools need to be flexible in the options and strategies they employ to increase parent involvement. Many programs under way currently explore these options in a variety of neighborhoods and settings (Bauch 1989; Chrispeels 1991; Cross, LaPointe, and Jensen 1991; Davies 1991b; Dornbusch and Ritter 1988; Jennings 1990; Lueder 1989; Olson, April 4, 1990; Silvestri 1989; Williams and Chavkin 1989; Wolf and Stephens 1989).

Finding time to become involved in their children's education. As busy as most parents have become, current involvement options are nonoptions for many of them, who find it difficult to attend meetings at the school during the day or evening. To deal with this problem, the school can establish higher expectations for parent involvement and provide a menu of options for parent involvement. This involvement cannot be mandated, but as it becomes more pervasive it helps strengthen the bonds of community; people encourage each other, and participation becomes more of a community norm. New arrivals in the community are socialized into an expectation of participation.

Parents then can be given support and assistance in choosing from among a range of options. Those parents who do not choose to participate can be contacted not by educators, but by their peers, who can help find ways for these parents to be involved successfully and productively. These ideas will require changes in the structure and organization of the school day and in the teachers' contract as well, conceivably, if we ask teachers to work with parents across a broader time spectrum.

Expanded use of videotape can allow parents to see their children in action at school. Outlines of expectations for parental involvement in assignments and projects throughout the year can be sent home for review. In a followup meeting, the specific skills necessary to assist on the project or task (along with necessary materials and equipment) can be explained and reviewed.

The home visit, once a fixture of most social-service agencies and now nearly nonexistent, can be revived as an option. Parents will need to know how and when to request a visit in situations other than crises resulting from inappropriate behavior. A home visit can and should be a time to show the parent how to be involved in the child's education.

Accepting education as a shared responsibility. Education and parenting are two intertwined activities. Teachers and parents can support, but not replace, one another. This message cannot be sent if educators lecture parents as if they were children and restrict involvement to narrowly defined arenas controlled by the educators. At the same time, parent behaviors that abdicate the responsibility for child rearing and nurturing cannot be ignored or condoned. Nor can single-issue parents be allowed to enforce their values on the entire school. Parent apathy, however convenient politically, cannot be allowed to be the institutionalized norm of the school community. Educators are the ones who will need to take the lead in redefining this relationship, but parents will be called upon to rethink their expectations and assumptions for public education, as well. This is a dialogue that, if successful, will spread beyond teachers and parents to include the broader community.

Perhaps programs that allow parents a choice of the school their child attends will be a mechanism by which parent involvement is enhanced. As parents consciously select a school or program, it is possible to establish clearer expectations beforehand for them and their children.

But even if choice is not employed, schools can expect much more of parents than what they do currently and can provide them with much more information than they receive currently about expectations for student performance and parent involvement. If schools provide varied opportunities for parents to be involved, they can begin to expect greater involvement. If educators are persistent and patient, they can institutionalize this expectation for involvement over time. Involvement is a critical first step toward redefining the roles and responsibilities of parents in the educational process.

THE COMMUNITY

Educators often take a somewhat calculating perspective on the obligation community members with no children in the schools have to support public education. These people have traditionally been considered in terms of their potential support for or opposition to requests for funding: How can they be encouraged to vote for bond and other tax elections?

Other segments of the community have often been perceived from an equally transactional perspective: How can donations be procured from businesses, and how can community agencies provide services the public schools deem supportive of the schools' mission? The relationship between the schools and the community is likely to be much more substantive.

Schools have great difficulty succeeding in dysfunctional communities, though success in such environments is not impossible (Purkey and Smith 1983). Many schools attempting to restructure recognize the need to develop more interdependent relationships between themselves and the institutions that surround them (Davies 1991b, Liontos 1990, MacDowell 1989). Although schools cannot make communities functional, they can serve as a nucleus for the nurturing of new conceptions of community. For schools to adapt to changes in their communities, they will need to be involved during this period when many communities are being forced to reinvent themselves to survive. Schools will be challenged to participate in the process of making communities more functional. Perhaps they can provide more opportunities for people to affiliate with one another in ways that satisfy their mutual self-interest and that motivate them to work together for an enhanced common good.

Admittedly, this prescription for the involvement of schools in the reinvigoration of communities is perhaps a bit overoptimistic. Schools do not have the power to bring about change in environments where issues of economic deprivation, racism, substance abuse, and lack of resources and opportunities are the dominant themes. Schools can encounter resistance from other governmental agencies and get caught up in "turf battles" when reaching out into the community. Nevertheless, many schools are actively restructuring their relationship with their community because they perceive no other alternative if they are to be successful with the young people they are charged to serve. When they are successful it is because they are not attempting this alone; they are working in close concert with public and private community agencies, governments, and business groups (Chrispeels 1991; Cohen, January 23, 1991; Payzant 1989).

Several suggestions of how different groups might be involved in education and in the redefinition of community follow.

Providing learning experiences in the world of work. To succeed with all young people, particularly with those who have been disenchanted with traditional academic environments, schools may have to extend learning beyond the school site and bring many more adults into classrooms (Glatthorn 1991). For this to occur, the community must become an active partner in education. *Community* here is defined broadly to mean all institutions, public and private, that have a stake in a well-educated citizenry and that may contribute to the educational experiences of young people.

Many community agencies and businesses may be asked to mentor students in their workplace, often as interns or observers, rather than as work-study students. They may be expected to help students learn, not just put them to work. This will be a new and, for some, a problematic responsibility. Support, guidance, and financial incentive will need to be offered to those in the private sector to induce large-scale participation.

The movement to provide learning experiences outside schools may have to be developed gradually. But such programs offer a potentially powerful strategy for making school more relevant to students and for easing the transition from school to work while simultaneously enabling the community to reexamine its involvement in education.

Recent reports and writings from the business community show a much greater awareness of the difficulties involved in changing public schools. Many of these reports are beginning to outline in much more specific language the kinds of involvement business will need to be [illegible]

[illegible] [illegible] likely that a student will connect with an adult.

Reviewing student credentials and linking hiring or pay to school performance. The high school diploma is not a functional form of quality control anymore. Social promotion, grade inflation, and dramatic variance among teachers in their grading methods result in graduates about whom little can be said that applies to all of them. Not all can write, read, do simple math problems, get along with others, work on a team, solve a problem, or continue to learn to meet the challenges of new situations. Employers, however, need employees who can do these things.

Several states are working on "certificates of mastery" that students could earn only after demonstrating specified skills. These certificates hold the promise of much better quality control. But employers will have to value these certificates, review them, and reward students who have them or do well in the work required to receive one. Only if employers do this will students accept the more challenging and demanding certificates and do the added work necessary to receive one.

Letting teachers and administrators work in noneducational settings in structured ways. Many educators have spent their entire lives in schools of one sort or another. They may have difficulty relating student learning to the world outside schools. Teachers need many more opportunities to leave their schools for periods of time to participate in and [illegible]

[illegible]

example, Waltner 1992). Teachers, however, have fewer opportunities. Schools and noneducational organizations can work together closely to provide structured programs of visitation and internship for teachers, both during the school year and the summer. These programs can allow teachers to rotate through several roles in a business or to complete a particular project from beginning to end.

[illegible]

Sharing facilities and combining resources. [illegible] at great expense. These facilities are scattered throughout the community and may be located inconveniently for the clients to be able to move among them. A first step is to begin to construct these facilities collaboratively, or at least in a coordinated manner. This can be a difficult first step if the schools and agencies do not have a history of collaboration. However, some communities have essentially insisted that local governmental agencies get their building programs together if they are to be funded.

Other opportunities for sharing resources exist. Sometimes personnel can be shared among agencies, as between schools and parks and recreation departments. Similar arrangements with social-welfare agencies are possible, though infrequently explored. Sharing space on a more limited basis, where one agency rents from another, is becoming more commonplace, as is coordinated scheduling, so that students have somewhere to go and something to do when they are not in school.

Releasing workers to support education. Business owners can be encouraged to support education by allowing employees to be released from work, perhaps once a month, to visit the public schools, to adopt a school, to provide tutoring, or to visit their children's classrooms more regularly. Such adjustments in work schedules (not additional vacation time) can often be accomplished with relative ease and minimal expense. [illegible]

Creating pressure for fundamental change in education. Educators cannot be expected to transform schools without support and leadership from those outside schools. The role of parents as supporters of change has been mentioned. The larger community has a responsibility [illegible] makes it more possible for local boards of education and school administrators to support, sustain, and be encouraged to initiate programs that radically reshape education and its relationship to the community.

Being involved in site-based decision-making. Qualified members of the community can be valuable participants in processes such as decentralized decision-making. Site-based decision-making will tend to have less impact on the basic assumptions and practices of schools if energetic, diverse, and imaginative voices from outside schools are not included.

Serving as judges for student demonstrations and assessments. For those not inclined to participate in governance or other formal structures, there can be many more opportunities to contribute to schools without making a long-term, formal commitment. As more alternative-assessment practices are instituted, and as the movement to outcome-based education continues in many states, there will likely be more widespread use of senior projects, capstone experiences, portfolio reviews, public demonstrations of skills, and other techniques that require students to demonstrate publicly their ability to meet certain standards and to apply certain skills successfully and competently. These can be judged by others in addition to educators, partly to lend added credibility

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[illegible]

and gravity to the activity and partly to help keep educators "honest," in the sense of helping them maintain their perspective and standards.

Becoming more aware of education as a shared responsibility. If businesses and corporations continue to believe that there is a relationship between the educational level of their employees and their ability to succeed in the marketplace, more partnerships and working relationships are likely to develop. It behooves both groups to explore ideas such as donations of equipment to schools, movement of school programs to work sites, provision for workers or executives to be "on loan" to a school district, and other innovative ways of strengthening the knowledge and ownership of public education within the total community. Many programs of this type exist and will need to be expanded. Many more will likely be created. This redefinition of roles and responsibilities will take place gradually, in much the same way that the reinvention and redefinition of community are occurring.

These types of collaborative relationships generally require some sort of impetus and ongoing management. This generally involves creating some sort of council at the regional level. These structures, sometimes called partnerships, are forums for the heads of organizations to explore possibilities and reach agreements that allow their staffs to begin the much more complicated work of making the concepts operational. Many communities are just now learning how to have all the partners communicate. Their next challenge is to move beyond conversation and general goodwill to collaborative relationships that benefit students and the community as a whole.

SUMMARY

This chapter brings to a close the discussion of the new roles and responsibilities that educational restructuring will require of people inside and outside schools. Chapters 1-7 describe some of the ways these new roles and relationships may emerge. The frameworks presented in these chapters contain many suggestions for the ways the roles will evolve. Rarely will all these examples occur at one time in one district or school. Schools are changing incrementally, even as they restructure. Roles are evolving.

This book is designed to present the emerging shapes and forms of educational restructuring, and these are the kinds of changes in roles and responsibilities that are, in fact, being actively pursued in various places throughout the nation. Changes of this magnitude do not take place easily or smoothly. They are uneven in their emergence and impact on practice. They are not necessarily amenable to direct control, particularly by school people.

I believe it's important for educators who attempt to change their schools to be aware of the impact internally and externally the shift to greater interaction with the outside world will have for schools. People's assumptions about the role of schools and their relationships to them are powerful forces in determining their behavior as they interact with schools.

This interplay between education's role in the broader social context and the specific views that individuals hold regarding their relationship to public education tend to limit and guide restructuring efforts at the school, district, state, and national levels. This is a particularly difficult set of interactions to control, and for that reason alone it may be somewhat frightening to educators. But acknowledging the need for changes in roles and changes in relationships with external constituents helps educators to guide, channel, or direct the development of these new roles in relationships to some degree.

The discussion now turns from the broad context for educational restructuring to the more specific programs being attempted by schools, what might be thought of as the "content" of restructuring. In part 3, I describe these strategies for restructuring schools in twelve areas. It should be borne in mind that without a reconsideration of the roles and responsibilities of all those associated with the enterprise of schooling, it is unlikely that any of the structural or programmatic modifications described in the next part will, in and of themselves, transform schooling. Many of the ideas and strategies discussed in the coming chapters can provide the impetus for teachers, parents, administrators, and others to alter their view of education, but only if the implementation of these programs is accompanied by a reconsideration of the roles and responsibilities as discussed in the preceding chapters.

PART 3

DIMENSIONS OF RESTRUCTURING

INTRODUCTION TO PART 3

As educators approach the task of restructuring, the first question many ask is: Where do we begin? Parts 1 and 2 help to establish the broad context for restructuring. Parts 3 and 4 provide more detailed and specific description of the projects, programs, and processes that are being undertaken in the name of restructuring. The chapters in this part, Dimensions of Restructuring, outline many of the activities and programs schools are defining as restructuring.

As I have studied educational restructuring I have asked myself whether schools can change quickly and comprehensively enough to stay in synch with their surrounding environments. Most of the changes I see occurring in schools are incremental; they take an existing practice and adapt it to new circumstances. A second approach, discontinuous restructuring, attempts to reinvent education. A number of experiments in this vein have been launched recently, including large-scale demonstration projects that encompass multiple schools (New American Schools Development Corporation, Edison Schools) and more decentralized approaches (charter schools, Annenberg grants, Next Century Schools).

Even these ambitious programs have had mixed success in their efforts to depart from the traditional educational mold. Over time, the powerful mental images people have regarding education may cause even the most radical attempts at restructuring to begin to resemble traditional beliefs and practices. This raises an important question: Can schools engage in discontinuous change? Can they, in fact, restructure themselves by means of radical transformation? The evidence to date is not heartening on this count.

This then raises the inverse question: Can schools transform themselves sufficiently through incremental change? Will a series of incremental adjustments be adequate to enable schools to retain their institutional legitimacy and the funding that accompanies it? Do schools that take the incremental route have the capacity to sustain the large number of separate, independent projects that will be necessary to achieve the types of radical improvement in student learning being called for from many quarters?

In the next section I examine many of these incremental approaches to restructuring. Not every trend or approach is included, for obvious reasons. Nor is there an attempt to distinguish elementary from middle-level and high school efforts. This stance is taken in part because many activities and strategies spill across levels (alternative assessment, project-centered learning, teacher leadership, technology, and interdisciplinary curriculum are a few examples). Similarly, while the agendas of urban, suburban, and rural schools are not necessarily the same, the activities presented in the following chapters are possible in all settings and are being discussed by at least some schools in all three environments. It is still too early to define completely an urban or suburban or rural restructuring agenda completely separate from the others.

It should be noted that these varied activities in and of themselves do not necessarily represent or cause restructuring in schools. Whether these activities result in restructuring depends on the ways in which they are implemented and conducted. For example, cooperative learning can be used as a strategy to practice the old math curriculum or to help children develop team problem-solving skills in science; a site-based governance council can simply replicate the inept decision-making of an administrator whom the council replaced or it can make decisions of higher quality and broader ownership.

The reader should bear in mind that the examples of trends and activities presented in the following twelve areas are not necessarily individually or in total "restructuring." Rather, they are a synthesis and summary of the range of strategies educators are considering to respond to external demands and pressures for change. They should be considered tentative and possibly transitory responses. Public schools are in a period of rapid and extensive experimentation. No doubt the ideas and trends described here will develop and permutate. It is also critical to note that many schools are talking about these innovations more than they are implementing them, and in the cases where schools implement them, they may be doing so without changing basic relationships and structures.

Restructuring is simultaneously exciting and a bit terrifying for educators. Given the tendency of school personnel to look to one another for models or programs before launching any new effort themselves—what DiMaggio and Powell (1983) call "institutional isomorphism"—this rapidly changing landscape offers little comfort to the faint of heart who are looking for "the answer" or "the restructured school" to emulate. Meaning is being created at the level of the individual school site based on needs and goals defined within a particular school. In this context, the twelve dimensions of restructuring are offered not as a manual but as a "roadmap" of restructuring.

CHAPTER 8

PREVIEW OF THE TWELVE DIMENSIONS

Activities and programs designed to bring about a remarkable array of changes are taking place in many schools today. In addition, numerous schools that have not necessarily changed their practices or structure have engaged in serious discussion, self-examination, planning, and pilot projects. Keeping track and making sense of all these initiatives is difficult for the average educator.

The twelve dimensions introduced here and described more fully in chapters 9-20 provide a convenient roadmap to many of the major trends and themes in each of these areas. My intent is not necessarily to critique these ideas and strategies, but to explain their rationale and goals. Some are supported by a body of research, while the efficacy of others remains to be demonstrated. Some respond directly to challenges faced by many schools, challenges brought on by changes in families and societies. Others are more idealistically conceived and expressed.

I would caution the reader to consider each initiative with a discerning eye. I hope to make it easier for the reader to understand the major directions restructuring is taking while encouraging continued analysis of each dimension by those interested in changing their schools.

Much of what is occurring under the banner of restructuring can be categorized as what Lindblom (1959) described as *incrementalism*—the gradual process of changing dimensions of organizational functioning to improve goal achievement. In theory, the net effect of these myriad small adjustments would be to remake the institution of schooling over time—and without the political disruption associated with more fundamental, rapid change. Kirst (1991) has called this approach to restructuring "project-itis," because schools generally respond by developing a new program or project that becomes defined as the "restructuring project." Upon its completion, the school is considered "restructured."

This notion that schools can be improved incrementally toward some ultimate ideal has been described by Tyack and Cuban (1995) as "tinkering toward utopia." Implicit in this strategy is a desire to avoid the upheaval and conflict that inevitably accompany more fundamental change. Also implicit is the idea that schools should pursue improvement for moral, idealistic reasons, rather than in response to shifting social conditions, economic realities, or customer and client expectations. While the vision of a restructured educational system that schools pursue may be idealistic, the motivation and support for change may derive from shifts in the surrounding social and economic systems. The question to be asked is as follows: Can schools remake themselves (and retain control of the process) in an incremental fashion quickly and profoundly enough to remain in sync with the environment within which they exist, and to respond to the needs of the clients they serve?

It is difficult to make sense of the multitude of activities being undertaken by schools in their attempt to tinker toward utopia. A previous publication (D. Conley, February 1991) offered a framework designed to make some sense of the myriad projects occurring in public education. This framework grouped restructuring activities into eleven broad dimensions, ranging from curriculum to personnel. Although there is considerable overlap, the act of identifying some distinct categories seems to be a useful way to help people understand what might best be described as "incremental restructuring" in public education.

If the term *incremental restructuring* sounds a bit like an oxymoron, that's because it is. This phrase highlights the challenges faced by public schools in their attempt to bring about fundamental change with this approach. Can schools remake themselves fundamentally through a series of projects or programs, however radical, that allow the basic structure and culture of the organization to remain intact? Do schools have the political will and the resources necessary to sustain these incremental changes until the point where cumulatively they have redefined the school as an institution?

The evidence at this point has not been encouraging, as one reads descriptions by practitioners and researchers of the difficulty schools have had putting relatively simple programs or changes into place (Brickley and Westerberg 1990; David 1991; Dwyer, Ringstaff, and Sandholtz 1991; Glickman 1989; C. Murphy 1991; Strauber, Stanley, and Wagenknecht 1990; Westerberg and Brickley 1991). Similarly, more ambitious projects such as the New American Schools Development Corporation's program to create a series of "break the mold" designs for new schools have run into problems both at the design and implementation stages (Bodilly 1996).

It is worth restating that the act of presenting this framework should not be confused with an affirmation of its use as the sole means or model by which to restructure schools. Rather the framework is designed to make sense of the multitude of activities that schools call restructuring.

The model leaves unanswered the larger question of the interaction effects that occur when practices in one or another of the dimensions are altered without regard to the implications for or unintended outcomes on the other dimensions.

The twelve dimensions are grouped into three subsets—central, enabling, and supporting variables—to identify their relative importance and the relationship between and among them. Four dimensions that focus directly on student learning are categorized as *central variables*: learning standards, curriculum, instruction, and assessment. Four dimensions that enhance the learning process are categorized as *enabling variables*: learning environment, technology, school-community relations, and teaching and learning time.

Four additional dimensions hold the potential to restructure education but are more removed from the classroom. This final set of dimensions are categorized as *supporting variables*: governance, teacher and principal leadership, personnel structures, and contractual relationships. Figure 1 portrays the relationships among these three sets of dimensions.

This chapter presents a general introduction to these dimensions and their three categories. The next twelve chapters offer more detailed discussions of each dimension.

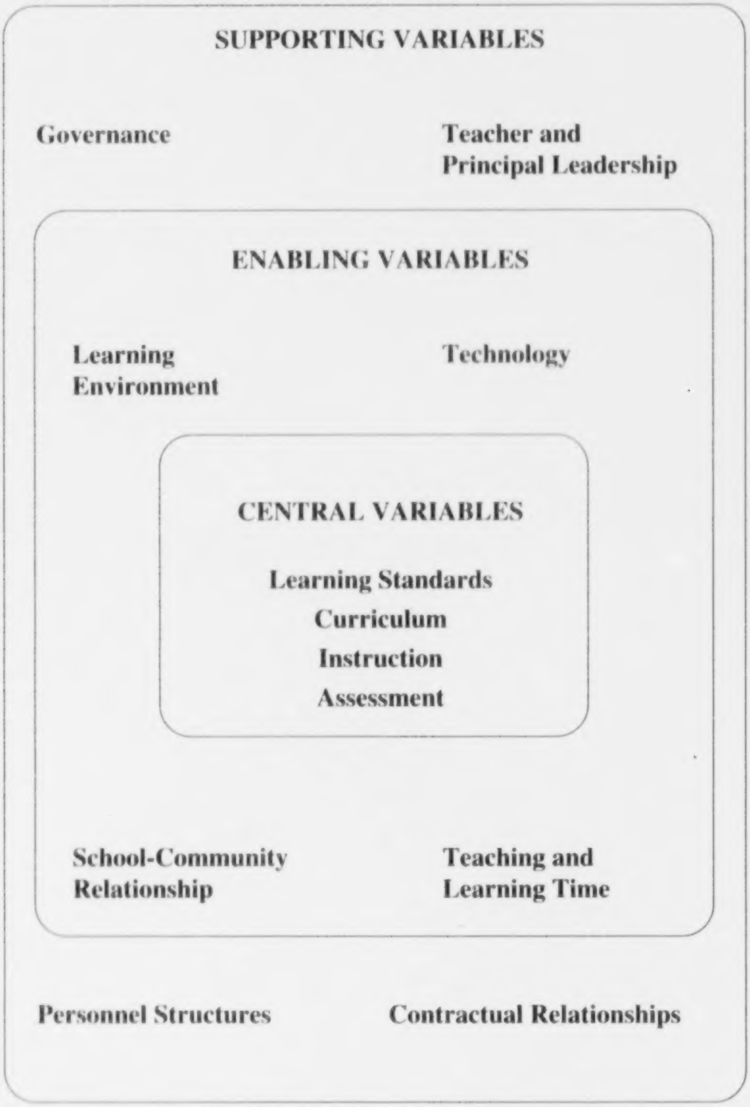
CENTRAL VARIABLES OF RESTRUCTURING

Learning standards, curriculum, instruction, and assessment comprise the central variables of this framework. Changes in these areas are at the heart of the teaching and learning process, what Elmore (1990) describes as the "core technology" of teaching. These dimensions include everything teachers do that relates to instruction: what they teach, how they teach it, how it is measured and evaluated. These activities are, after all, supposedly the raison d'être of public education. If change is occurring in these areas, it is reasonable to state that education is experiencing fundamental change.

As might be expected, change at this level is the most difficult to achieve. Examination of early restructuring strategies (Lewis 1991, David and others 1990, Lewis 1989) revealed that they rarely reached these central variables, since this is where teachers "live." Teachers' identities are often closely associated with what, who, and how they teach. When developing "restructuring" strategies, most educators appear to prefer to look first at change in almost anything other than these variables.

FIGURE 1

DIMENSIONS OF RESTRUCTURING


SUPPORTING VARIABLES
Governance
Teacher and Principal Leadership
ENABLING VARIABLES
Learning Environment
Technology
CENTRAL VARIABLES
Learning Standards
Curriculum
Instruction
Assessment
School-Community Relationship
Teaching and Learning Time
Personnel Structures
Contractual Relationships

When educators identify *performance standards*, they are determining what it is that students should be able to do as a result of the education they receive. Standards are statements that delineate those behaviors, knowledge, and skills most valued in the educational process. They indicate the goals students and teachers should pursue and provide a reference point against which student performance can be measured. Standards can be stated in terms of the content students are to master or in the form of broader intellectual processes that cut across subject areas.

The creation and use of performance standards suggest a new relationship of teacher to learner and learner to learning; it is not enough simply to offer learning experiences if the learner cannot demonstrate the ability to apply the learning at some point in a meaningful way. Failure cannot be an acceptable result of teaching; the system has to be designed to ensure that essentially all students are capable of reaching the specified standards.

Changes in *curriculum* call into question what is worth knowing and how knowledge should best be organized. Much of the traditional structure and content of the curriculum is being closely reexamined, from the national to the state to the local level. Many national subject-matter organizations and state departments of education are issuing new curriculum guidelines. Teachers are becoming more involved as curriculum developers. There are substantial changes occurring in the general education and vocational tracks of high schools. Even the traditional core curriculum for the college-bound is being reassessed. Curriculum change is difficult, given the conflicting policy signals schools receive and the material they use. Such signals are often not congruent with the goals schools pursue.

The variable *instruction* entails all the strategies used to engage students in learning and the assumptions educators have regarding the relationship of the child to the learning experience. Instructional strategies are beginning to include the learner to a greater degree. Learners construct meaning from the experiences presented to them; not everyone learns the same thing from the same experience. There is a greater emphasis on developing the ability to think, reason, and solve problems, rather than simply to memorize information. Moreover, the unique needs of at-risk students are being considered to a greater degree as instruction is reconceptualized.

Assessment encompasses the strategies by which teacher and learner determine the results of the learning process. The goal of assessment is to ascertain the student's performance in relation to standards and to enable learners to take more control over their learning. The trend is toward forms of assessment that serve two purposes simultaneously: providing data that allow the student and teacher to know what remains to be learned and mastered by the student, and demonstrating when the student has reached a prescribed level of performance. Assessment is linked to standards, so that everyone—parent, student, and teacher—knows what is expected of the student in any given learning setting. By almost any measure, the range of methods and techniques for assessment is increasing tremendously beyond traditional teacher-constructed paper-and-pencil tests.

ENABLING VARIABLES OF RESTRUCTURING

The ability to bring about changes in the central variables often requires, or is aided by, alterations of other practices closely related to instruction. These variables, called the enabling variables, are *learning environment, technology, school-community relations*, and *teaching and learning time*. This is not to suggest that, in practice, schools proceed to plan for changes in the central variables, then consider how to modify the enabling variables in a way to support changes identified in the central variables. Quite the contrary: In many cases it appears that schools are limiting their focus to these enabling variables and hoping that changes here will ultimately lead to changes in the central variables. The assumption seems to be that if these structural dimensions within which learning occurs are altered, it will cause the methods and content of teaching to change as a result. While this may, in fact, occur at times, there is no guarantee that alterations in the structure and organization of the school automatically translate into changed behavior within classrooms by individual teachers.

The *learning environment* encompasses ways in which the relationship between learner and teacher is structured, such as the number of years an elementary teacher remains with a class of students, the grouping of students by ability or otherwise, the use of schools-within-schools, or the extension of learning beyond the four walls of the school.

Technology is considered as a separate dimension, since it can be used in any number of ways, some of which support restructured learning, others of which do not. In this sense, technology can enable restructuring to occur if used in ways that empower learners and enhance the quality and quantity of student learning, or it can simply replace one form of drill-and-practice with another. *Technology* is defined broadly to include many different forms of information-processing devices. Some of these devices, such as computers and video equipment, are commonly associated with restructuring, but others, such as the telephone, are often overlooked.

School-community relations includes the role parents have as partners in the educational process, as well as the ways the broader community generally and the business community specifically can be involved in the education of young people. Various organizations from the business community have proposed remedies or models to transform public schools. This dimension also encompasses the newly emerging collaborative relationships between schools and social-service agencies. Finally, educators in restructuring schools are experimenting with strategies to involve and communicate with parents.

The *teaching and learning time* dimension refers to altering the school schedule in some way, either in terms of the way time is allocated within the school day or in terms of the length of the school day or year. A variety of options and models have been proposed. Some educators have succumbed to the temptation of thinking that by making changes in this single dimension, they are engaged in restructuring.

A great deal of energy is being devoted to programs focused on these variables. Programs in these dimensions can have the appearance of being significant changes without engendering the political opposition that changes in the central variables tend to cause. In secondary schools in particular, changing the schedule has become especially popular, but it is not necessarily accompanied by the changes in classroom teaching that must occur for any new schedule to affect student learning.

Elementary schools may favor the introduction of a computer lab to demonstrate that they are keeping up with the times. Closer examination may reveal that the lab is staffed by an aide and that teachers drop off their classes at the lab [illegible] the computer [illegible] the technology has not penetrated the classroom. It has not had an impact on the central variables.

Apparently, some reform-minded educators hope that by changing the schedule, developing schools within schools or multiage elementary classrooms, creating technology labs, or involving parents more in the education of their children, sufficient pressure will be created to induce change in the central variables. The assumption—a big one—is that teachers will be compelled to alter basic practices in the face of changes in the structures that surround their classroom. It is worth noting that there is little evidence at this point to support this assumption.

SUPPORTING VARIABLES OF RESTRUCTURING

There is another level at which changes are occurring that are being labeled as "restructuring." By and large, these address organizational conditions of teaching and schooling. These variables are the furthest removed from classroom life in their immediate impact and are, paradoxically, being touted by some reformers as the prerequisites to any change in classroom behaviors. These variables include *governance, teacher and principal leadership, personnel structures,* and *contractual relationships.*

All initiatives to decentralize decision-making in schools fall under the category of *governance,* be they site-based management, participatory management, school-based decision-making, or any of the variations on this theme. These attempts were among the initial remedies offered to restructure schools (Clinchy 1989; David 1989; Elmore 1988; Guthrie 1986; Mertens and Yarger 1988). They are threatening and difficult to implement successfully because they force administrators to redefine the ways in which they exercise power, and they are often greeted with suspicion and cynicism by teachers who may be particularly concerned about new governance models that require significantly more time on their part.

When site-based management schemes do not require all teachers to do anything new or different [illegible] a "site council," the teacher may continue [illegible] and change can be left to those who [illegible] Not surprisingly, the [illegible] site-based decision-making structures [illegible] teacher working conditions, and teacher performance in the classroom or student learning, since there are no [illegible] the process of teaching and learning.

Issues of choice in public education are also included in this category. There are at least three types of choice: choice within a school, choice among schools in a district, and choice between public and nonpublic educational options. Choice continues to surface in many policy proposals and appears to be gaining credibility among policymakers at the federal and state levels. Among the public, broad philosophical agreement regarding choice is reflected in the 1995 Gallup Poll, which found supporters outnumbered nonsupporters by more than a two-to-one ratio among virtually every major segment of the population, including parents of public-school children (Elam and Rose 1995). Nevertheless, the specific programs offered to operationalize this emerging support of choice continue to disappoint.

The evolving sense of teacher professionalism has led to a proliferation of new programs of *teacher and principal leadership*. Some of the new roles being created are familiar, such as the role of mentor teacher; others, such as site team leader or teacher researcher, are less familiar. Many schools are experimenting with roles for teachers such as teacher-as-reflective-practitioner, in-building staff developer, lead teacher, or team leader. Many of these roles blur the boundary between "labor" and "management." Teachers are undertaking many tasks that have been considered at least quasi-administrative. They are also exercising more control over working conditions through site committees and other governance structures. These new leadership roles can threaten the existing leadership (and social) structure present in a school, as new leaders emerge and traditional ones are displaced.

Principals play a key role in restructuring through their leadership. They are challenged to develop new styles of leadership that facilitate involvement, development of leadership in others, communication, and consensus decision-making. Principals who lead schools that are restructuring span boundaries, seek resources, and coordinate more than direct the school's various change activities and new relationships.

The way *personnel* are employed to staff schools is another dimension along which restructuring may occur. The current personnel structure has two categories: (1) professional, or certificated, staff (the roles of administrators and teachers) and (2) classified staff, generally in roles such as instructional assistant, secretaries, custodians, and food service workers. In terms of education, training, salary, and responsibility, the gap between certificated and classified staff is generally quite large. [illegible]

In addition, the roles of many certified support staff within schools are being reexamined. Counselors and library media specialists, for example, are working as parts of teams to improve student learning rather than as isolated workers with bounded responsibilities who do their jobs oblivious to the rest of the school.

The dimension *contractual relationships* refers primarily to teachers' unions and their relationships with administrators and boards of education. Changes in contracts can support restructuring in classrooms and schools, but rarely cause it. Many changes in this dimension involve the addition of what is called "permissive language": individual sites are permitted to receive waivers from the contract if certain procedures are followed (such as a majority vote of the faculty), but, once again, no site is required to do so.

Other changes include the development of Policy Trust Agreements and the use of collaborative-bargaining techniques to build trust, improve problem-solving abilities, and enhance communication. The intent of changes in contractual relationships often appears to be to create a more "professional" working relationship between leaders of the teachers' organization and the administration, which is considered a precursor to more substantive change.

These twelve dimensions help capture and categorize the thicket of projects and programs currently under way in schools. Some of these ideas have originated in schools or districts; others have come about as the result of state mandates. In either event, they offer a picture of the daunting challenges facing schools attempting to remake themselves. Where and how schools can be expected to get the resources and energy necessary to attempt changes of this magnitude and complexity will be examined in a later chapter devoted to the process of restructuring. For now, suffice it to say that schools involved with restructuring face a Herculean task, described by Schlechty (1990) as akin to changing a flat tire on a car that is moving down the highway at sixty miles per hour, or rebuilding an airplane while it's in flight.

LEARNING STANDARDS

No other single change has promoted as much excitement (both positive and negative) as has the notion of learning standards. In short, learning standards are any set of measures against which students are assessed. Although individual teachers can and often do have standards, the term as used here refers to standards that are consistent across schools in a district or state. Individual teachers do not develop their own standards, though they are responsible for applying the district's or state's standards.

Standards-based systems generally require students to meet the performance level specified in the standard in order to proceed or be certified. This differs dramatically from the current system, where students put in a specified amount of time, then move to the next learning level or experience with no assurance of the knowledge and skill level they have attained. The method of assessment, or required level of performance, is also set external to the individual teacher's classroom. The teacher may or may not have a role in determining whether the student meets the standard.

The implications of a standards-based system are profound. So are the concerns it has raised. On the surface it would seem that few would disagree with making education more accountable to ensure students actually have learned what they have been taught. In practice, disagreement has been sharp over this approach. The reasons for disagreement are manifold and often go far beyond the technical aspects of a performance-based learning system to include philosophical views on the proper role of the school and the family in child rearing.

Many types of learning systems have been labeled as standards-based recently. However, a standards-based system must meet the following criteria to be included in this discussion:

1. It must be teachable.
2. It must be assessable given current assessment technology.
3. It must represent a higher level of achievement than students generally reach in the current system.

4. It must be in a form that is communicable and comprehensible to students and parents.
5. It must cause teachers to adapt instruction to ensure students meet standards, rather than simply overlaying standards onto existing curriculum and instruction with little change in content or methods.
6. It must provide support for students who are not able to meet standards initially.

TYPES OF STANDARDS

Making the discussion even more complicated is the variety of types of standards. There are at least four primary types of standards: (1) academic-learning standards, (2) intellectual and social-skill standards, (3) generic work-readiness standards, and (4) industry-skill standards. An additional type of standard commonly mentioned, the performance standard, is included as one element in the description of the components of a standard.

Curriculum, or program, standards represent one more type of standard. However, these standards "are best characterized as descriptions of what should take place in the classroom; as such, they address instructional techniques, recommended activities, and various models of presentation" (Kendall and Marzano 1995). They do not meet the criteria listed above for being included in this discussion.

These four categories of standards provide a more precise description of expected student performance and help to eliminate some of the confusion that accompanied initial attempts to specify student learning in terms of performance. In the sections that follow, I consider these four basic types of standards and provide examples of each.

ACADEMIC-LEARNING STANDARDS

As their name implies, academic-learning standards focus on student academic knowledge and skill generally in areas familiar to parents, teachers, and students. Academic-learning standards are organized into disciplinary categories such as math, science, social sciences (or history, civics, economics, geography, sociology, psychology, anthropology), foreign (or second) languages, English (or humanities and literature), and visual and performing arts.

Within these categories the knowledge and skills a student must retain and apply are clearly delineated and appropriate assessments are developed. The assessments may take the form of traditional paper-and-pencil tests or may involve more application of knowledge in the form of problem-solving, for example. The standards can be interdisciplinary in nature, requiring students to apply information learned in one discipline to problems generated in another.

Academic-learning standards generally have two dimensions: content knowledge and cognitive skills. Content knowledge is identified clearly. Can the student factor a polynomial, specify the components of a theory, identify geographical locations and features, use basic vocabulary to answer questions, apply several writing styles as appropriate, critique a piece of art by identifying the styles and influences present in it?

Process skills cut across content areas and are embedded within academic-content knowledge. Can the student solve a problem in math, science, or social sciences? Can the student analyze divergent points of view or seemingly conflicting information in science or literature to reach an independent conclusion or verify someone else's conclusion? Can the student construct an argument in writing to defend a point of view? Can the student use a variety of sources appropriately to research a topic and present conclusions in writing? These skills are key to understanding academic content but are not necessarily specific to a particular discipline.

INTELLECTUAL AND SOCIAL-SKILL STANDARDS

This category includes areas that are more difficult to specify but are extremely important complements to the more content-oriented academic-learning standards. The first wave of "outcomes" tended to emphasize these more generic skill categories over content knowledge. Although these skills are critically important, many of the initial advocates of outcome-based learning perhaps overlooked the fact that all intellectual processes can only be demonstrated in the context of challenging content. For example, problem-solving as a skill has no meaning without a content framework within which to solve problems.

The linkage of content and process is inextricable. Therefore, to identify separate process skills is somewhat arbitrary. However, identifying them does indicate their importance.

The following examples delineate many of the commonly cited intellectual and social skills. Accompanying each skill is an extended definition that helps teachers and students understand better the nature of the skill and suggests how it should be taught, developed, and extended as challenging content is mastered. Furthermore, the extended definition suggests many things that should be built into any assessment of content knowledge, thereby allowing these process skills to be assessed in the context of challenging content.

- *Reading* is the process of decoding abstract symbols to understand their underlying message or meanings. Effective readers employ a variety of strategies to improve comprehension, to self-correct, and to discover meaning in many types of text. A fluent reader can interpret a writer's literal and inferential meaning, recognize the differing goals of different types of writing, use all the features of a written document (for example, tables, index, appendices, footnotes), vary the method of reading (skim, review, survey, analyze), and make connections between texts and personal experiences. Reading is undertaken for a variety of reasons, including enjoyment, information acquisition, comprehension, and critical analysis.
- *Writing* is a tool for learning, for communication, and for self-reflection. Writing may serve to inform, stimulate, and challenge a variety of audiences. The writer organizes and clarifies her or his thinking so that it is comprehensible, informative, moving, or entertaining to others when read. Conventions of writing, including grammar, syntax, spelling, structure, and voice, must be understood and mastered. The writing process contains a number of recursive dimensions, including prewriting, drafting, organizing, revising, editing, and critiquing. Effective writers employ a variety of written forms (for example, stories, essays, journals, technical reports, poetry, research papers) and can evaluate, monitor, and critique their own writing to produce a coherent and polished result.
- *Communication competence* includes both the skills of listening and speaking. Competent oral expression comprises the ability to ask clarifying and extending questions, express generalizations discovered through investigations, debate, persuade, initiate and sustain conversations, present feelings and emotions, share and exchange ideas and opinions, give directions, and critique oral presentations. It involves verbal and nonverbal behaviors and the ability to employ and to decode each appropriately.
- *Analytic thinking* is the ability to apply deductive and inductive thinking; make and test conjectures; follow logical arguments; judge the validity of arguments; construct simple valid proofs; understand and apply reasoning processes; develop appropriate criteria for analyzing data or opinions; distinguish fact from belief; identify cause and effect; and respond to multiple perspectives. Analytic thinking is necessary in all areas of study from the fine arts to mathematics.
- *Problem-solving* is a series of skills, some systematic, some intuitive, that are developed over time as the result of attempting many

complex, nonstandardized problems. Problem-solving may be inductive, deductive, or nonlinear. Effective problem-solvers employ many of the following techniques: identifying the critical elements of the problem; developing multistep solutions in a nonroutine fashion; generalizing familiar solutions and strategies to new problems and situations; generating alternative solutions and strategies for familiar problems and situations; conducting systematic observations and investigations to collect data; and considering the implications and unintended effects of proposed solutions.

- *Technology as a learning tool* means coming to view any technology as an extension and enhancement of the human mind, not as a separate mechanical system. While the use of technology requires *content* knowledge, a vital key is the *process* ability to integrate the technology to facilitate inquiry, understanding, and production of knowledge. Using technology includes such skills as knowing how to operate and when to employ computers, online databases, telephones, fax machines, electronic mail and bulletin boards, and calculators. It also includes operation and use of audiovisual and multimedia tools, including video cameras and recorders, projection systems, LCD panels, CD-ROMs, sound-recording devices, and slide projectors. There is a hardware and software dimension to many technologies. Competent learners master both, with greater emphasis on the potentialities of the software dimension.

- *Teamwork* encompasses the social dimensions of learning and doing. A learner who is proficient at learning socially works well with others to create products, solve problems, reach consensus, negotiate, and cope with conflict. Effective team members understand the diversity present in any group and how it affects performance and goal attainment; demonstrate an understanding of the various roles present in groups; show the capacity to lead and follow, depending on the situation; understand the balance between individual and group contributions and responsibilities; understand both individual and group accountability; and show awareness of the role and potential uses of humor when people work together.

- *Integrative thinking* requires an understanding of the interactions within, between, and among natural, social, organizational, and technological systems, and the relationship of the individual to such interactions. Integrative thinking uses or combines information from a variety of disciplines in an integrated fashion to demonstrate understanding of the world, and to solve problems or create products. Integrative thinking requires the ability to synthesize and integrate information and observations from the parts to form a new pattern or framework for comprehending the whole.

- *Quality work* is the relative degree of excellence present in a student's work as compared to defined standards or criteria. Quality work may be evaluated along any of a number of dimensions, including its content, structure, presentation, insights, conclusions, or entertainment value. To assess quality, students must be capable of comparing their work continuously to internal and external standards. Schools striving for quality create an ethos in which the nature of quality is discussed and standards for achieving quality are identified. Quality work involves ongoing critique and evaluation of products as they evolve. Students with an understanding of quality can describe the nature of quality and of standards and can critique and evaluate the quality of products as they are being developed and when they are completed (Conley and Tell 1996).

GENERIC WORK-READINESS STANDARDS

Whereas employment-skill standards are industry-specific, generic work-readiness standards cut across all lines of work. They describe what a student must learn to be successful in the work world, regardless of chosen or preferred occupation. A number of national studies have sought to determine what employers identify as generic work-readiness needs of prospective employees. Perhaps the two most influential have been *Workplace Basics: The Skills Employers Want* (Carnevale, Gainer, and Meltzer 1990) and the *SCANS Report* (Secretary's Commission on Achieving Necessary Skills 1991). Their recommendations were presented in detail in chapter 2.

Employers are not asking schools to prepare workers via the old vocational or business-education model, where schools train students to use very specific equipment in very specific ways. Instead, they ask schools to ensure workers can do the following types of things, summarized from the two reports, in a highly competent manner:

- Read, write, speak clearly and accurately, listen and follow directions appropriately and safely, perform basic mathematical operations without error.
- Think creatively, make decisions, solve problems.
- Know how to learn, expect and continue to learn throughout their work life.
- Demonstrate personal responsibility; set and achieve personal goals; have pride in themselves, their work, and their ability to be successful.
- Possess the interpersonal skills necessary to work as a team member to achieve a goal, teach others, and serve customers.

- Develop the ability to assume responsibility and motivate coworkers when necessary.
- Perceive their role within the organization, understand the organization's goals and their contributions to those goals.

Workers are also expected to have additional competencies, including the following:

- Ability to allocate time, money, and materials wisely.
- Ability to acquire and evaluate data, organize and maintain files or other information systems, use computers to interpret data.
- Ability to select and operate appropriate equipment and tools safely.
- Ability to remain free of alcohol and drugs and be punctual and properly prepared for work.

INDUSTRY-SKILL STANDARDS

These standards are related to specific categories of employment and attempt to define what skills a student should be mastering to enter a particular field of employment. Industry-skill standards can apply to a category of work, such as industrial manufacturing, tourism, or business management, or to a specific industry, such as printing. They fill the gap left by the demise of union-apprenticeship programs and by the inability of school-based vocational-education programs to keep pace with a rapidly changing work world.

These standards identify the new skill mix required to work in a particular occupation and suggest what students should be doing to prepare accordingly. More specific than generic work-readiness standards, they suggest the types of preparatory experiences students should seek if they have an interest in a particular field. Such information is particularly useful when developing career-awareness programs and, for older children, school-to-work opportunities.

The development of industry standards began during the Bush Administration when the U.S. Departments of Labor and Education mounted a collaborative effort to develop a national system of voluntary industry-based skill standards. This activity involved representatives from twenty-two industries and industry groups. Grants were awarded in industries such as electronics, printing, biotechnical sciences, and metals. These grants required the industry group to produce a clear set of skills needed by workers to enter the industry and perform successfully.

Since many industries have numerous types of entry-level positions, the process was complex.

The Clinton Administration continued this effort through the Goals 2000: Educate America Act (1994). This act established a twenty-eight-member National Skill Standards Board to review, endorse, and further implement the standards.

States have begun the process of adapting the detailed industry skill standards to the more general educational programs that characterize high schools. In this process, states attempt to balance the types of generic work-readiness skills listed previously with the more specific competencies needed in a particular occupation or job cluster within an industry or industry group.

For example, the National Retail Federation (1994) identified a series of "modules" that characterized the skills needed for retail sales. Each module contains more detailed specifications of the behaviors necessary to do this type of job successfully. The modules are like standards with proficiencies and indicators. Here are the standards identified for Professional Sales Associates. Full detail is provided only for the first proficiency and its associated indicators:

Module 1: Provide Personalized Customer Service
  1.1 Initiate Customer Contact
    1.1.1 Determine customer's needs by listening and asking questions
    1.1.2 Make shopping experience enjoyable for customer
    1.1.3 Give customer appropriate greeting
    1.1.4 Direct customer to additional services such as delivery, alterations, gift wrapping
    1.1.5 Refer customer to another department/store
  1.2 Build Customer Relations

Module 2: Sell and Promote Products

Module 3: Monitor Inventory

Module 4: Maintain Appearance of Department/Store

Module 5: Protect Company Assets

Module 6: Work as Part of a Department/Store Team (Schray 1995, pp. 41-46).

These standards embody a task analysis of the behaviors an employer would expect from a worker in this area of employment. While they may suggest some learning activities that would help students develop such skills, most people, educators and business leaders alike, would agree that schools are not the most appropriate place for such specific job training to occur. At the very least, it would be impractical for schools to address the complexity present in the economy through specific training programs. Gone are the days when wood shop, auto shop, metals, drafting, business classes, and home economics were adequate to prepare students for most categories of employment.

In Oregon, Schray (1995) reported on proficiency standards from a state-level development process in the area of business and management. These standards were generic to all business and management positions; at the same time, they were referenced to more detailed standards such as those of the National Retail Federation. The result was ten general proficiency standards, each with more detailed "extended definitions" that function as proficiency indicators. This project went further to provide suggested instruction, curriculum, and assessment models along with instructional strategies and curricular suggestions. The ten proficiency standards follow. Extended definitions are provided for two of the standards: the first standard, to suggest the structure of all ten, and the seventh standard, to show its link to the business-skill standards above.

1.0 Understand and apply economic principles

The student will be able to analyze, interpret, and communicate the application of economic principles at local, state, regional, national, and global levels.

Extended Definitions:

1.1 Supply-and-demand principles

1.2 Business cycles and competition

1.3 The role and impact of government and regulations in economics

1.4 Monetary and fiscal policies

1.5 The impact of cultural and environmental issues and conditions on economics

1.6 Personnel practices; management, employee, and labor-union issues

1.7 Economic history, research, and forecasting techniques

1.8 International trade

2.0 Implement standard business practices and procedures
3.0 Develop business-career potential
4.0 Communicate effectively in a business environment
5.0 Manage business records and documents efficiently
6.0 Analyze and interpret business trends and operations
7.0 Promote products and services convincingly

Extended Definitions:

  7.1 Identify audiences and potential customers for company products and services
  7.2 Plan strategies for the presentation of products and services that promote sales
  7.3 Evaluate the following influences on products and services: competition and changes in economic, legal, political, social, cultural, environmental, and technological factors
  7.4 Organize various methods of presenting products that meet the needs of different audiences and customers
  7.5 Promote product and service benefit to customers
  7.6 Utilize professional selling techniques to gain customer acceptance of products and services
  7.7 Assess the effectiveness of presentational, promotional, and selling activities

8.0 Collaborate for business problem-solving and strategic planning
9.0 Utilize time, personnel, and material resources effectively
10.0 Understand and comply with legal, health, and safety requirements (pp. 21-40)

These standards would also guide development of "contextual learning experiences," where all students, regardless of their career aspirations or postsecondary plans, would be able to share a common learning experience, then apply it in terms of their future aspirations. Students might engage in a simulated business experience, for example, then produce different products depending on whether they intended to go directly to a four-year college, to community college, or to the world of work. The standards would also frame "school-to-work" experiences in which students would receive firsthand exposure to an actual work site through avenues such as job shadows, mentoring, and project-based learning.

COMPONENTS OF A STANDARD

Academic standards generally have several distinct components, each of which is designed to provide successively greater clarity and detail to permit teacher, student, and parent to know what is expected of them, and to allow appropriate assessments to be developed. Without adequate clarity, teachers do not know what to teach, students do not know what to learn, and no one knows what to assess. Therefore, most standards contain the following eight elements:

1. *Performance area*: The performance area is a general statement of the field of study or skill to be mastered.

2. *Extended definition*: This statement gives a more detailed explanation of the performance area, indicating the desired emphases to be given within the field of study and often defining the area more precisely.

3. *Proficiencies or competencies*: These statements describe the knowledge or skills students are expected to master. A proficiency or competency is not a detailed description of the curriculum to be taught or a list of everything the student should know after completing a course of study. Instead, it may identify key "capstone" skills that can only be demonstrated if a series of prerequisite skills have been mastered. The proficiency may also define skills or knowledge that would only be gained in the context of more exhaustive study.

4. *Proficiency indicators*: Specifying the proficiencies in more detail, the indicators are the bridge to the design of curriculum and assessment. They provide enough detail to allow teachers to know what to teach and to permit assessments to be designed.

5. *Performance standards*: This component designates the level of performance students must attain to meet the standard. Each standard must have a level that is designated "adequate," "proficient," or "acceptable." This standard tells the learner and teacher what must be demonstrated for the standard to be designated as achieved. Performance standards

> specify "how good is good enough." They relate to issues of assessment that gauge the degree to which content standards have been attained.... [T]hey are the indices of quality that specify how adept or competent a student demonstration must be. A performance standard indicates both the nature of the evidence (such as an essay, mathematical proof, scientific experiment, project, exam, or combination of these) required to demonstrate that the content standard has been met and the quality of student performance that will be deemed acceptable. (Wurtz 1993)

6. *Performance levels*: The performance levels designate the behaviors, skills, knowledge, and demonstrations that precede and exceed adequate performance. The performance levels combined with the performance standard compose a rating scale for the standard. This scale may take the form of numbers (1-5), role descriptions (novice, proficient, expert), development levels (emergent, fluent, advanced), other more "judgmental" categories (minimal, acceptable, outstanding), or even letters (A-F). The performance level and assessment method are very closely interrelated. Sometimes the reporting method of the assessment and the performance levels are synonymous.

7. *Knowledge domain*: This component states the total amount of knowledge and information the student is expected to master, regardless of what specifically is assessed within the domain. Stated differently, the knowledge domain represents the assumed knowledge students have, both for the purpose of assessing that knowledge and for constructing further learnings.

8. *Assessment method*: A method of assessment is used to determine whether the standard is achieved. Each proficiency might have its own assessment method, or one assessment might provide information on multiple proficiencies. In some cases the assessment method and performance level will be the same. In others, the assessment will allow for multiple levels of performance.

EXAMPLE OF A STANDARD

The following example of an academic-skill standard contains the elements listed above, except the knowledge domain and performance levels, which have not been included here because of space limitations. It is drawn from Oregon's Proficiency-based Admission Standards System (PASS). Students will be required to demonstrate their skill on forty-nine proficiencies at prescribed levels to be eligible for admission to college. This example is one of ten proficiencies in mathematics where students would be required to demonstrate knowledge and skill:

Mathematics Proficiency E

Proficiency:

Utilize probability and statistics in the study of various disciplines, situations, and problems; understand and apply valid statistical methods and measures of central tendency, variability, and correlation in the collection, organization, analysis, and interpretation of data.

Indicators:

1. Extract and interpret descriptive statistics from data.
2. Prepare graphs and charts such as histograms, scattergrams, and box plots.
3. Analyze and interpret statistical graphs and charts.
4. Compare sets of data in terms of variability, measures of central tendency (e.g., mean, median, mode, standard deviation), and correlation.
5. Determine experimental and theoretical probabilities, compare probabilities, and use either, as appropriate, to represent and solve problems involving uncertainty.
6. Understand and apply the concept of a random variable to generate and interpret probability distributions.
7. Recognize and utilize valid sampling techniques in drawing inferences.
8. Use probability and statistics to examine the validity of a claim, test a hypothesis, study a problem, or make defensible predictions based on data.

Performance Standard:

Proficient performance consists of the following elements:

Criterion 1: using probability concepts and models to represent and interpret a situation or problem

The student:

- selects and uses appropriate probability concepts, models, or simulations
- uses appropriate and exact diagrams, tables, lists, fractions, and decimals to represent probabilities
- utilizes probability concepts to ensure appropriate investigative design, sampling, data analysis, and/or interpretation/conclusions

Criterion 2: collecting data through statistical investigations, experiments, simulations, or surveys

The student:

- poses a question, hypothesis, or prediction which can be investigated through the use of statistical methods, and/or probability simulation

- plans, tests, and critiques investigative designs (and/or surveys), considering issues of randomization, appropriate data, and effective data-gathering techniques
- develops an investigation of reasonable complexity, depth, and importance to the discipline or context
- collects and organizes a reasonable size database, identifying appropriate variables and fields

Criterion 3: summarizing, presenting, and analyzing data

The student:

- uses appropriate mathematical symbols, terms, calculation methods, and technology to compute and represent statistics accurately
- selects and uses appropriate tables, plots, and graphical displays to accurately represent and study data; reads and interprets graphical displays correctly
- correctly applies concepts and statistical measures of frequency, central tendency, variance, and correlation in the representation and analysis of data

Criterion 4: interpreting data and developing conclusions related to the question, claim, hypothesis, or prediction and the discipline or situation being investigated

The student:

- clearly and correctly explains information represented in summary statistics, tables, and graphs
- draws inferences or makes predictions that are related to the original question/hypothesis and that are supported by the data collected
- reviews and critiques the investigative design, data collection, and analysis for sources of error and bias
- develops conclusions appropriate to the situation investigated

Criterion 5: reporting the investigation and interpretation: representing data, using statistical evidence appropriately, expressing ideas

The student:

- represents data, mathematics, and thinking clearly and completely
- uses statistical evidence appropriately, considering the situation and audience
- develops and expresses ideas coherently

> *Assessment Methods*:
>
> Mathematics Proficiency E requires that students know fundamental concepts of probability and statistics and be able to use those concepts in the investigation of various disciplines, situations, and problems. Demonstration of the proficiency implies demonstration of understanding, application in original investigations involving data analysis, and application in more than one context. Understanding of the mathematical concepts and skills represented in the Domain of Knowledge chart could be assessed through tests, classroom exercises, or projects in which those concepts must be used and exhibited.
>
> The student could design and conduct investigations, simulations, experiments, or surveys. Students could demonstrate their abilities through a series of activities or a longer term project involving either group or individual investigation, but each student must be held accountable for and assessed on her/his own representation, analysis, and interpretation of data. A teacher verification of this proficiency implies the combining of information from multiple assessments.
>
> Because the proficiency stresses varied disciplines and situations, it lends itself to cross-curricular demonstrations, particularly in science and social studies (see Science E and Social Sciences K). Demonstration of the proficiency should also involve the demonstration of process proficiencies in Analytical Thinking, Problem-solving, Technology, Quality Work, and other process or content proficiencies. (PASS Project 1996)

This sample proficiency illustrates various elements of an academic standard. In doing so, it not only suggests the possible rigor or challenge that can be achieved through the use of a standard, but also the tremendous distance most schools would have to travel to be prepared to expect such performance from most or all students, to teach in ways that allowed students to reach this level of performance, and to assess students in a reliable and valid fashion to determine if they meet the standard.

ANOTHER TYPE OF STANDARD: OPPORTUNITY TO LEARN

Opportunity-to-learn standards are frequently discussed at the policy level in states and in the federal government when performance-based learning systems are being considered. The Council of Chief State School Officers (1995) states that opportunity-to-learn standards

> describe the circumstances and conditions provided to ensure that each student has the quality of personnel, courses, curriculum, materials, technologies, instructional time, working space, financing, procedures for placement, provisions for special aid, and other services necessary to achieve content and student performance standards.

Opportunity-to-learn standards relate not to student learning but to the conditions that surround student learning. They are among the most controversial standards, in part because they are seen by some as a possible excuse educators could use if students did not achieve standards. However, they are important to consider in situations where the standards applied to students have high stakes, in other words, if achievement of the standard by the student is the prerequisite for something of value (diploma, college admission, promotion to the next grade). In such cases, considerations of equity demand that all students have roughly the same opportunity to learn. This principle is relatively easy to agree upon; it is much more difficult to translate into practice.

But at its most basic level opportunity-to-learn has come to mean that students have access to the rudiments necessary to perform to the expected standard: teachers who know the material, adequate physical resources, and a learning environment that can conceivably prepare them to reach the standard. Unfortunately, far too many students currently lack access to even these rudimentary elements and will never be able to reach high standards. Opportunity-to-learn standards remind policy-makers that setting standards alone is not enough; simply putting the responsibility on the student does not solve the problem if the student is not given a reasonable opportunity to learn what is necessary to master the standard. The system has some responsibilities as well.

TWO EXAMPLES OF SYSTEMS BASED ON LEARNING STANDARDS

Learning standards are used in several areas already. Although few American schools have managed to institute a system that is fully standards-based, many students already are being judged against external standards.

Advanced Placement Program. The College Board's Advanced Placement (A.P.) program is an example of a standards-based system. While A.P. teachers are free, and even encouraged, to teach in the ways they find most appropriate given their students and their own teaching methods, all students who take A.P. classes eventually take the same test if they wish to receive an A.P. score from The College Board. The A.P. exams are developed centrally by The College Board, generally under the supervision of Educational Testing Service, and administered nationally.

Teachers do not score their own students' exams. Instead, exams are returned to The College Board, which organizes the scoring process. Trained scorers are assembled who then review the exams and rate them against a common scoring system on a 1-5 scale. Safeguards exist to ensure interrater reliability and validity for the scoring. Students then receive a score from 1 to 5 on the exam.

Victorian Certificate of Education. The state of Victoria in Australia converted to a standards-based system in 1990. This system, known as the Victorian Certificate of Education, or VCE, applies to all students in the state. The VCE relies on Work Requirements and Common Assessment Tasks (CATs) that change regularly to determine student proficiency. Teachers are sent detailed information on new CATs as they are developed. The teachers and their students then work together to develop the knowledge and skills needed to perform well on the CAT. The teacher serves as a guide and coach, providing regular feedback as well as instruction.

As the student's work approaches a stage where it is ready to meet the specified criteria for the CAT under study, the intensity increases. Students submit their final work, which may be judged by their teacher, by other teachers in the school, or by teachers at other schools.

Quality control is maintained through administration of the General Achievement Test, a traditional paper-and-pencil standardized-test format developed specifically to provide validation of the scores Victorian students receive on their CATs. If the scores students in a particular school are receiving on their CATs are out of line with the scores predicted by their GAT scores, the work from that school is rescored en masse, and a student's score may be adjusted upward or downward. Such quality-control measures help ensure high fidelity of interpretation of standards by Victorian teachers (Victorian Board of Studies 1995).

INTERNATIONAL, NATIONAL, STATE, AND LOCAL STANDARDS

International comparisons of educational systems were the basis for much of the original criticism of American schools. They were found lacking when ranked against other industrialized countries in areas such as math and science. The initial frame of reference, then, for standards was that they be "world class," that they enable American students to compete with other children in an increasingly global economy. Setting aside for the moment the issue of the accuracy and even the significance of such rankings, standard-setters encountered a host of problems trying to develop comparable standards among national educational systems and across cultures. As Linn and Baker (1995) observed:

> It is relatively easy to set arbitrary cutscores on an international assessment such as the identification of selected percentiles in leading countries (e.g.,

> the use of the 25th, 75th, and 90th as minimal, acceptable, and outstanding levels of achievement). However, such cutscores cannot be expected to correspond to performance standards that are derived from established content standards and a consensus judgment that the assessment evidence supports the conclusion that students have achieved at an acceptable or outstanding level.

Resnick and others (1995) conducted extensive analysis of mathematics standards in France and The Netherlands to determine both the issues involved in comparing performance between the countries and the lessons America might learn from the approach to standards taken by these two countries. They concluded it is feasible to make comparisons among countries, but that such an "international benchmarking model"

> calls for a set of common questions to be posed of educational systems in comparison states: What is the structure of schooling in other countries? What are students expected to know and be able to do? What kinds of performances are used to demonstrate competence? What counts as "good enough" in these performances? What portion of students is meeting the standard? What reform efforts are underway? Responses to these questions are used to display defining features of different systems in social, institutional, and cultural contexts.
>
> Other questions will have to be posed about strategies for ongoing professional development, engagement of parents, school size, and motivation of students to achieve.

While Resnick and others are optimistic about the ultimate feasibility of comparing national performance to international benchmarks, their work points out the complexity of the process. Politicians and the public have been more interested to date in "cutscores," simple numbers that tell which country is doing "better" than the others. Creating comparisons that can be used in policy-making processes and public discussions will be challenging, particularly in subject areas that are inherently more culturally dependent, such as social sciences. For the time being, most of the judgments about how well students are reaching standards will likely be in the form of comparisons among states within the United States.

NATIONAL STANDARDS

Standard-setting in this country began in earnest at a meeting convened by then-President Bush and the National Governors' Association in Charlottesville, Virginia, in September 1989. The NGA, chaired at the time by Arkansas Governor Bill Clinton, reached consensus with President Bush that the nation should set goals for improving the educational system. From this bipartisan process was born in March 1990 America 2000 and its six goals, the first national goals for education. This was a voluntary approach whereby the states would be free to adopt their own standards, but the federal government funded national curriculum organizations to create model standards in seven commonly taught areas including science, geography, history, civics, English, foreign languages, and the arts. In four other areas, curriculum groups proceeded without federal funds.

These goals were very general in nature and were as concerned with the processes and context of learning as with learner competencies. Only goals 3, 4, and 5 contained reference to enhanced skills and implied performance levels. The original six were:

1. All students will start school each day ready to learn.
2. The high school graduation rate will increase by the year 2000 to at least 90 percent.
3. Students will leave grades 4, 8, and 12 with demonstrated competency in challenging subject matter.
4. American students will be first in the world in mathematics and science.
5. Every adult will be literate and will possess the knowledge and skills to compete in a global economy.
6. Every school will be free of drugs and violence and will offer a disciplined environment conducive to learning.

The role of national goals became more elaborate and ambitious when Governor Clinton became President Clinton. He reshaped America 2000 into Goals 2000 and created mechanisms for creating model national standards. The National Education Goals Panel had released recommendations in 1991 for a system to measure progress toward the National Education Goals. It recommended creation of "a national assessment system to measure student achievement in key subject areas, a 'child-development profile' to gauge children's readiness for schooling, and a student-identification system to track students across districts and states" (Rothman, April 3, 1991).

Goals 2000 continued funding for model standards begun under America 2000. It also included provisions for creating the National Education Standards and Improvement Council and an expanded National Education Goals Panel. These groups would have statutory authority to review standards from federal projects, states, publishers, local districts, and others, and determine whether to "endorse" them or not. This plan for a federal "Good Housekeeping Seal of Approval" for standards never came to fruition because of concerns raised about the possible creation of one set of national educational standards.

STATE INITIATIVES

State efforts had been initiated around the same time many of the national standard efforts were undertaken, so that by August 1995 twenty-five states had content standards developed in at least some subject areas, and nineteen states had projects in progress (Council of Chief State School Officers 1995). These projects vary in quality and level of ambition. They represent the first time states have attempted to specify the results their educational systems will achieve in terms other than test scores.

Most states had curriculum objectives or frameworks, but these did not make clear what students were to be expected to know, only what was to be taught. Standards projects often translate these curriculum documents into student-performance terms and define or imply new assessment methods necessary to ascertain student skill and knowledge in the designated areas.

OBSTACLES FACING SCHOOL DISTRICTS

Many local school districts have developed their own standards over the past five years. These efforts have proved to be somewhat transitory for the most part. It is exceedingly difficult for one school district to enforce higher standards than other districts. Parental support may dwindle if some parents are told their children do not meet the standard, or if children bring home "report cards" that do not contain the familiar A-F markings. Parents will be unable to compare their child's performance to their own when they were in school, or to that of children of relatives or friends from other school districts. Many parents worry that their children will be at a disadvantage for college admission if their progress is reported in any form other than course-based grades.

So, while some districts make concerted efforts to implement systemwide standards (for example, the Thompson School District in Loveland, Colorado), such efforts are difficult if they do not occur in a broader context within a state that requires districts to adopt local standards or comply with state standards. As of mid-1996 only a few states had completely implemented statewide standard-and-assessment systems, and few local districts had made the transition to standards, except on a limited scale. Large-scale implementation remains the next challenge for standards-based education.

THE FUTURE OF STANDARDS

Educational standards face an uncertain future. The idea is attractive on the surface, but the reality of developing them and instituting practices to support them has proved problematic.

Who, then, supports standards? Legislators often do until specific groups object to specific standards. Educators may support them until they realize the amount of change required to have all students achieve them, and the possibility that schools (and teachers) might be held accountable for students not achieving the standards. Parents support them in the abstract, for other people's children, but often become concerned if it looks like their children might not reach the standard, or if the changes required by a standards-based system might affect their children's access to higher education. Students can hardly be expected to be the advocates for higher standards. As bored and unchallenged as some are, few see more demanding school work as the answer to their disaffection.

Where can advocates look for a constituent group to serve as the champion of standards? To date, business is the primary advocate of educational standards, the group that has provided the most consistent support, from David Kearns (Kearns 1988, Kearns and Doyle 1988), former CEO of Xerox, to Louis Gerstner, former CEO of RJR Nabisco (sponsor of the Next Century Schools program) and CEO of IBM. Business has several reasons to support standards.

First, the language of standards is familiar to business. American industry has had to embrace standards and quality over the past two decades to remain competitive. During this time, many industries have grown accustomed to the language and culture of standards. They have little difficulty applying these concepts to education.

Second, business sees itself as a "consumer" of the "products" of the education system. Graduates become employees. Many business leaders point to the amount they spend on remediation of entry-level workers as justification enough for higher educational standards.

Third, though less frequently stated, many industries simply need smarter consumers and workers to function at all. The joke about VCRs that flash 12:00 for years after they are purchased only begins to describe how products have often become more complex and consumers less competent. Companies now spend more and more on 1-800 services to explain to consumers how to use their products. A more highly educated consumer would be more capable of reading and understanding instructions, using product features, understanding what to do if simple problems arise with products, communicating with a customer representative about the nature of problems they encounter with products, and providing feedback on how to improve products. Some Americans are certainly able to do these things, but many are not. Intelligent consumers will support intelligent products.

Similarly, workers must follow more complex safety and production procedures and rules. They must be more cognizant of their actions and the implications of any errors they make. They must think, solve problems, and anticipate breakdowns for the organization, whether it is production- or service-oriented, to function effectively. Well-educated workers are now a key variable in the productivity equation.

A potential third constituent group has shown only peripheral interest in the standards movement to date (Conley 1996). The nation's colleges and universities have long decried a perceived decrease in the knowledge and skills that each successive class of freshmen seems to bring with it. Grade-point averages have increased more or less continuously since the mid-1960s, while other measures of knowledge and skill have held constant or have decreased over the same period. Grades increase but performance does not.

One side effect is an increase in the proportion of students who are admitted to college as being fully qualified, but must immediately enroll in remedial courses to participate in the required program of study. It is not unusual for half the students in many colleges throughout the nation to need remediation in mathematics and nearly as many in writing. The California State University system, which by law must draw from the top one-third of the graduating class, has seen remediation rates top 45 percent.

This phenomenon not only lowers the academic expectations that colleges can have for their students, but it lengthens the time students must stay in college to graduate. The cost of a college education continues to rise, and with it the expectations students and parents have of success. And as enrollment in most public colleges remains relatively constant, legislators will expect a larger proportion of admitted students to move quickly (and successfully) through the system, rather than building new campuses. Moreover, legislators find it hard to understand why college students are learning (and receiving credit for) exactly the same material they were taught in high school a year before.

These forces may converge to see higher education institutions support standards as a consistent quality-control tool that does what grades no longer do: ensure that a student is prepared to do college-level work successfully (Conley 1996b).

Will the support of business be enough to sustain standards? Probably not. Much depends on educators both in the public schools and in colleges and universities. Will they come to view standards as tools that make them more effective, that enhance their ability to hold students to high expectations and performances? Will teachers perceive standards as tools that help them engage students in challenging learning?

Standards can provide a rationale and justification for curriculum material and tests. Furthermore, standards can provide a basis for grades that cannot be challenged or manipulated by students (or parents). If educators come to see these benefits as warranting all the difficulty involved in adopting standards, at least two constituencies will then support the implementation of standards in American schools. Educators and businesses leaders may then be able to assuage nervous parents and inconsistent legislatures.

If the standards movement is abandoned altogether, the future of American education is less clear, with more than 15,000 school districts, 110,000 schools, and 2,000,000 teachers essentially setting their own standards. Few other public educational systems in the world are allowing such variability in student performance at a time when national boundaries offer little protection from competition and comparison among nations, and the need for an educated citizenry and skilled work force within each nation is increasing dramatically.

CHAPTER 10

CURRICULUM

The importance of changes in curriculum may seem to be self-evident, but restructuring has yet to have a dramatic effect on this core area of schooling. Having made this statement, I also recognize that changes in curriculul m take time and that the early results of curriculum-development projects begun over the past five years are just now beginning to be seen. Educational restructuring, which began with changes in governance structures, has matured into a movement that attempts to change the material students learn.

Smith and O'Day (1991) discuss the centrality of changes in curriculum and instruction as a component of any systematic program of restructuring and the challenges that accompany attempts to restructure curriculum:

> Although restructuring literature stresses the critical importance of developing complex problem-solving and higher order thinking skills in our youth, achieving this goal requires a major reorientation in *content and pedagogy* as well as in the structure of the educational enterprise. Perhaps more importantly, it requires a reconceptualization of the knowledge and skills we expect our children to learn, and of the teaching and learning process. This in turn will require that existing elementary and secondary teachers learn, and learn to teach, considerable amounts of new material in the physical and social sciences, humanities, and mathematics. (p. 234)

Meaningful, long-term change in education does not occur without curriculum reform. Lewis (1991) reports results from a study of urban middle schools involved in reform or restructuring. She uses the following excerpts from an interview with Joyce Epstein to make the point that curricular reform is central to school restructuring. As Epstein points out, reform of the curriculum is a challenging, critical component necessary, but often lacking, for the transformation of urban schools:

> The hard work of making urban middle schools successful lies in the curriculum. This is not where schools usually begin when they consider reforms. Too many never get to this point at all and instead become enmeshed and discouraged with organizational change. Joyce Epstein of The Johns Hopkins University, studying the effects of curriculum offer

> ings on eighth graders, observes: "The core—the essence—of any school is its curriculum and instruction. No matter what else is improved in the name of school reform or restructuring, if the curriculum does not challenge the students or if the instructional approaches are inappropriate, the students will not learn as much as they might, nor will they develop a love for learning.... Schools usually work first on mechanical changes that are immediately visible, such as creating teams of teachers who work in wings of schools; or establishing seven-, or eight-, or 16-period days; or scheduling a teacher-group advisory period to discuss students' concerns and development. These are important but not sufficient reformations for improving middle grades education and increasing the success of early adolescents." (Lewis 1991, p. 61)

Underlying many of the changes in curriculum are changing assumptions regarding knowledge itself. One basic assumption underlying much curriculum—that knowledge is objective and exists independent of human thought and action—is being reexamined. "Learning is a social phenomenon," argues J. Murphy:

> New views about what is worth learning are emerging in restructuring schools. In these classrooms, the traditional emphasis on content coverage and rote learning of basic skills is being challenged by more in-depth treatment of topics and a focus on higher order thinking skills....
>
> The teacher-centered instruction that is at the heart of the factory model of classroom instruction is giving way to growing demands for learner-centered pedagogy. (J. Murphy 1991, pp. 19-20)

To examine curricular changes under way in each of the academic disciplines, in technical preparation, in school-to-career and school-to-work programs, and in various interdisciplinary models is beyond the scope of this book. However, it is possible to discuss some general trends. These include:

- attempts to strike a new balance between coverage and depth in the curriculum
- efforts to balance subject-specific information and knowledge with more general, cross-disciplinary skills
- efforts to achieve greater balance between subject-area content and intellectual processes through infusion of tasks that generate higher-level thinking
- extensive experimentation with curriculum integration
- changes in the way curriculum is developed
- the role of various national reports suggesting new conceptualizations of particular subject areas or disciplines

- new structures for vocational education, including technical preparation and school-to-work programs
- the challenge for traditional core academic courses

COVERAGE VERSUS DEPTH IN THE CURRICULUM

Reformers agree that curriculum restructuring needs to address (or redress) the balance between coverage of material and depth of understanding of material (Sizer 1984, Wiggins 1993). Howard Gardner (1991) describes the limited ability of college students majoring in physics to apply basic Newtonian principles to problems not structured like those they encounter in the classroom, or of students' compulsion to apply mathematical algorithms, to find numbers to "fill in the equation," to solve problems, rather than demonstrating comprehension of appropriate and applicable mathematical concepts.

While few American schools can identify an overt curriculum theory that underlies their program, most are heavily influenced by the products of textbook publishers, who, for good reason, include as much as possible on as many topics as possible. Teachers often talk of "covering" the curriculum, perhaps not pausing to reflect that "to cover" can mean "to hide from sight" as well as "to provide instruction."

As long as a school's theory of curriculum remains unstated, teachers will most likely continue to cover as much as possible in as little depth as possible, since this is how effective teaching is judged. As long as this is the operative design model and norm in schools, it will be very difficult to achieve the depth of understanding it appears students will need to function in the workplace and society in the future.

The debate over coverage versus depth begins with the crucial, and controversial, issue of what is worth knowing and what is the school's rightful role in the intellectual development of the learner:

> The aim of precollegiate education is not to eliminate ignorance. The view that everything of importance can be thoughtfully learned by the 12th grade—notice I did not say "taught"—is a delusion. Those who would treat schooling as designed to educate students on all important subjects are doomed to encounter the futility that faced Sisyphus: the boulder of "essential content" can only come thundering down the (growing) hill of knowledge.
>
> ...The inescapable dilemma at the heart of curriculum and instruction must, once and for all, be made clear: either teaching everything of importance reduces it to trivial, forgettable verbalisms or lists; or schooling is a necessarily inadequate apprenticeship, where "preparation" means something quite humble: learning to know and do a few important things

> well and leaving out much of importance. The negotiation of the dilemma hinges on enabling students to learn about their ignorance, to gain control over the resources available for making modest dents in it, and to take pleasure in learning so that the quest is lifelong.
>
> An authentic education will therefore consist of developing the *habits of mind and high standards of craftsmanship* necessary in the face of one's (inevitable) ignorance.
>
> ...The task is to *reorganize* curriculums more than to add or subtract from them. The aim is to establish clear inquiry priorities within a course, around which facts are learned. (Wiggins 1989, pp. 44-47, emphasis in original)

Wiggins goes on to point out that if high standards are applied consistently, not all students need to learn exactly the same thing. He also asserts that an understanding of the outcomes sought by the teacher, rather than the material to be covered, must be the starting point for determining essentials, and that "the essentials" are not synonymous with "the basics." The essentials recur in different guises and levels of difficulty within a course of study and over the term of a child's education.

Wiggins also points out challenges that are arising as the goal of the curriculum changes and teachers exercise more control over curriculum development:

> The implication for curriculum design in all of this is profound: if the students' questions partially determine the direction of the course, it will no longer be possible to write scope and sequence lesson plans in advance. The teacher and the students must have the intellectual freedom to go where essential questions lead, within bounds set by the general questions, themes, and concepts of the syllabus. The teacher must have access to material that offers a variety of specific inquiries to pursue, with suggestions on how to deepen student responses and to use the text as a more effective resource. *The textbook, instead of being the syllabus outline and content, would be a reference book for student and teacher questions as they naturally arise.* (p. 47, emphasis in original)

If curriculum reform means injecting more higher order cognitive tasks into the existing fact-based, basic-skills curriculum, this may result in even greater gaps in achievement between the "haves" and the "have nots":

> What is particularly disturbing is that, with regard to the higher-level cognitive goals now proposed,... basic skills models may further disadvantage those students already at risk in our schools. While an emphasis on isolated facts and skills is unlikely to foster complex thinking skills among students generally, less-advantaged students often lack a surrounding environment that helps them fill in the gaps and draw the connections

> necessary to construct complex meaning in such situations (Peterson, 1986). (Smith and O'Day 1991, p. 240)

It is difficult for many in education to rethink their assumptions about the curriculum (and their role in delivering that curriculum) at the level Wiggins and Smith and O'Day suggest. Curriculum reform is made all the more difficult by the "fragmented policy system [that] makes substantial, widespread change in instructional practice and curriculum virtually impossible" (Smith and O'Day 1991). However, there are a number of attempts at significant curriculum revision already under way in several subject areas. These projects will be discussed briefly later in this chapter. Their effect on practice is yet to be determined, but their impact on policy discussions has been substantial in many instances (Viadero, September 23, 1992).

BALANCING CONTENT AND PROCESS

As new curriculum is developed, some ask: Should students really use their time learning things they will most likely simply access electronically throughout their lives, or should they concentrate on developing the cognitive habits and skills that cut across subject areas. If the answer is the latter—the curriculum would emphasize cognitive process—then should students be exposed to a wide range of content knowledge, without being expected to know the same things?

Many schools that moved first into "outcomes-based education" have already confronted the challenge of creating a balance between transmission of content and development of intellectual processes. Some pioneering schools have encountered resistance because their communities have interpreted an emphasis on cognitive skills as an abandonment of content knowledge (Davis and Felknor 1994). Attempts at statewide frameworks based on intellectual processes such as "interpret human experience," "deliberate on public issues," and "quantify" have engendered similar reactions.

However, at the same time, public schools are sharply criticized for failing to produce students who think. Most of the existing curriculum developed during the seventies and early eighties, the heyday of behavioral objectives and "back to the basics," is heavily oriented toward discrete, observable, measurable behaviors and competencies. This focus, combined with measurement technologies and techniques that are more amenable to capturing information about low-level cognitive skills, helped ensure that classroom teaching in the eighties emphasized content knowledge, often presented in an unconnected manner. Lewis (1990) explains the impact on the curriculum of the educational reforms of the early eighties and quotes Clune and others to support her assertion that the addition of more required courses did not necessarily lead to enhanced student thinking:

> The cheap, easy policy of requiring students to take more core academic subjects passed over the nation's classrooms with hardly a ripple. Higher requirements resulted in more students, especially middle- and low-achievers, enrolling in basic academic courses, according to William Clune and others [1989] in a study for the Center for Policy Research in Education. However, higher requirements "failed in getting students into the most rigorous possible courses, in producing a reasonably uniform education for all students, and, probably, in conveying the higher-order skills necessary for a competitive economy." (Lewis 1990, p. 534)

The conception of knowledge as a tool for intellectual development and even social justice has tended to be downplayed in the decades following the sixties, when it was emphasized in some curriculum, perhaps to the neglect of more specific content knowledge. The abilities to think critically, solve a problem, present a rationale for a choice, argue convincingly for a point of view, or research an issue were not necessarily emphasized or tested extensively in the program of instruction offered to the vast majority of students in the late seventies and throughout the eighties. A subset of students, generally those who were college-bound, received a program of instruction that encouraged them to develop these abilities. But the performance of these students did not seem to improve over time as they were admitted to college. In fact, the reverse seemed to be taking place throughout the seventies and early eighties. This lack of emphasis on process skills may have contributed to the fragmentation of knowledge into "infobits," or "factoids" as one cable-television network calls them, and to the inability of high school and college graduates to apply much of what they had learned to real-world situations.

The results from the National Assessment of Educational Progress (NAEP) seem to verify this conclusion. A report on the NAEP results states:

> The curriculum is treated as a collection of discrete content areas in which teachers move from one topic to another in lockstep fashion. As a result, lessons are often developed in isolation from one another and fail to help students relate their new learnings to what they already know. (Applebee, Langer, and Mullis 1989, p. 33)

Lewis (1990) elaborates on the lessons the NAEP reports teach about the content and structure of the curriculum:

> The NAEP reports have been consistent in their findings about the inability of students to go beyond basic skills—their inability to elaborate, to

> synthesize, and to solve problems. While this failing is certainly related to uncreative instructional strategies, dull content is considered equally at fault. The pattern begins with the minimalism of basal readers, say the curriculum reports, and continues through secondary texts and the minimum competency testing that emphasizes discrete, unelaborated skills. (p. 535)

One of the challenges curriculum developers in the nineties have embraced is how to use content knowledge as the framework for developing key intellectual processes. How can students be motivated, first to identify the information they need for the particular learning at hand, and then to apply that information in ways that result in the information being retained and integrated into more general thinking strategies? This will be a formidable task in schools where students have fared quite well simply by reciting a minimal amount of factual information.

CURRICULUM INTEGRATION

Many middle schools and elementary schools have been experimenting with increased integration of curriculum across traditional subject-area boundaries. Numerous permutations exist. In fact, the combinations being attempted to breach the boundaries of the disciplines are too numerous to mention. Almost any combination of subject areas can be found if one looks at enough schools. A recent example of integration between art and biology at the high school level illustrates this diversity. The vigor and creativity behind this movement to develop integration of knowledge at the school level is impressive.

Integrated curriculum can take many different structural forms. Vars (1991) identifies three distinctly different strategies: all-school themes, interdisciplinary teams, and core curriculum. These strategies exist along a continuum of increasing collaboration among staff on teaching duties and consensus on core elements of the curriculum itself. As agreement is reached about what students should know in broad terms, collaboration and integration can increase. If a school allows each teacher to determine individually what his or her students should learn, integration is nearly impossible.

Fogarty (1991), providing even greater detail, describes ten ways to integrate curriculum:

> Beginning with an exploration *within single disciplines* (the fragmented, connected, and nested models), and continuing with models that integrate *across several disciplines* (the sequenced, shared, webbed, threaded, and integrated models), the continuum ends with models that operate *within* learners themselves (the immersed model) and finally across networks of learners (the networked model).

> The *fragmented* model, the traditional design for organizing the curriculum, dictates separate and distinct disciplines....
>
> ...The *connected* model... provid[es] a close-up of the details, subtleties, and interconnections within one discipline. While the disciplines remain separate, this model focuses on making explicit connections within each subject area.... The key to this model is the deliberate effort to relate ideas within the discipline, rather than assuming that students will automatically understand the connections....
>
> ...The *nested* model... takes advantage of natural combinations. For example, an elementary lesson on the circulatory system could target the concept of systems, as well as facts and understandings about the circulatory system in particular....
>
> ...[In] [t]he *sequenced* model..., [a]lthough topics or units are taught separately, they are rearranged and sequenced to provide a broad framework for related concepts. Teachers can arrange topics so that similar units coincide....
>
> ...The *shared* model... [uses] overlapping concepts as organizing elements, [and]... involves shared planning or teaching in two disciplines....
>
> ...The *webbed* model... usually use[s] a fertile theme to integrate subject matter, such as Inventions. Once a cross-departmental team has chosen a theme, the members use it as an overlay to the different subjects.
>
> ...The *threaded* model... threads thinking skills, social skills, study skills, graphic organizers, technology, and a multiple intelligences approach to learning throughout all disciplines. The threaded model supersedes all subject matter content.... Using the idea of a metacurriculum, grade-level or interdepartmental teams can target a set of thinking skills to infuse into existing content priorities....
>
> ...The *integrated* model... [uses] a cross-disciplinary approach [to blend] the four major disciplines by finding the overlapping skills, concepts, and attitudes in all four. As in the shared model, the integration is a result of sifting related ideas out of subject matter content. The integration sprouts from within the various disciplines, and teachers make matches among them as commonalities emerge....
>
> ...The *immersed* model... filters all content through the lens of interest and expertise. In this model, integration takes place *within* learners, with little or no outside intervention. [For example, A]fficionados, graduate students, doctoral candidates, and post-doctoral fellows are totally immersed in a field of study. They integrate all data by funneling them through this area of intense interest....
>
> The *networked* model..., [l]ike a three- or four-way conference call, provides various avenues of exploration and explanation. In this model, learners direct the integration process. Only the learners themselves, knowing the intricacies and dimensions of their field, can target the necessary resources, as they reach out within and across their areas of specialization. (pp. 61-65)

BEST COPY AVAILABLE

Heidi Hayes Jacobs (1989) discusses interdisciplinary curriculum design and implementation. At one extreme are discipline-based designs where little if any integration occurs. The first stage with any functional integration is the parallel-discipline design.

> For example, if the social studies teacher teaches a World War II unit in the beginning of spring semester, then the English teacher will reschedule her autumn book, *My German Soldier*, to coincide with the social studies unit. (p. 15)

Parallel-discipline design is one way to create some potential linkages between what students are learning in one class and what they are learning in another. However, in this approach, students must integrate the material on their own after the teachers from each discipline present their lessons independently.

Complementary discipline units or courses bring together related disciplines in a formal unit or course to investigate a theme or issue. This method allows curriculum to diverge from the expected or required scope and sequence associated with each individual subject area. Teachers plan lessons together in a much more conscious and deliberate fashion than in the parallel-discipline model. This approach can help teachers learn how to work and plan together without requiring them to move beyond their comfort level in regard to collaboration.

Interdisciplinary units or courses synthesize all disciplines in the school's curriculum.

> The main point is that the designers attempt to use a full array of discipline-based perspectives. The units are of specific duration: a few days, a few weeks, or a semester. This option does not purport to replace the discipline-based approach; rather, they are mutually supportive. (Jacobs)

This model makes significant demands on teachers' time, on the school's schedule, and on the overall design of the curriculum. Unless designed carefully, such experiences might inadvertently reteach concepts or information students have already been exposed to elsewhere. Furthermore, by and large students and their parents are unaccustomed to integration, so they will need to be educated about the value of such approaches.

Integrated-day models are full-day programs based primarily on themes and problems emerging from the child's world. This approach is seen more often in the primary grades in this country. It requires the ability to capture a large block of uninterrupted time during the school day, and often involves learning that occurs outside as well as inside the school. Each day presents its own challenges and problems. Such approaches must be carefully planned; usually they develop over time as integrated activities expand and take on greater complexity from year to year. Rarely do they spring full-blown from a school that has little experience with integration.

Completely integrated programs are rarely found in public-school settings. One of the most prominent examples is Outward Bound, where the world becomes the curriculum, and the students learn the lessons that arise as they interact with their environment in some structured, goal-oriented fashion. Needless to say, this approach requires a particular kind of teacher (and student). However, for certain populations and in certain situations, this approach can work as a supplement to traditional teaching and learning.

Some schools have summer programs where students perform service work, perhaps in another country. These programs have the potential to function as completely integrated models with careful planning and attention to appropriate learning goals.

Jacobs recommends that schools combine the design options, both over the course of the school year and throughout the day and week. Schedules can accommodate a wider range of learning than single-period classes. Special times can be set aside for integrated activities. Teachers can have choices about how much integration they participate in, or at what rate they become comfortable with the notion. Rarely can schools convert to integrated models in a short time.

Curriculum integration is not without its problems. Particularly at the secondary level, it generally requires collaboration between two or more adults who are expert in specific content areas. This collaboration includes joint development of curriculum (or translation of an existing curriculum into appropriate lesson format), joint planning of instructional activities, agreement regarding what students will be expected to know from each discipline individually and in combination, coordinated assessment strategies, and, in some cases, joint instruction within the classroom.

Creating the conditions for this level of collaboration to occur requires many adjustments in the organizational structure of most schools. It also requires adults who are inclined to operate in close collaborative relationships. This may be why there is more integrated curriculum in elementary schools, where one teacher generally delivers most of the instructional program, thereby eliminating some of the need for collaboration. The differential expectations of teachers for the level of specialized content knowledge in elementary versus secondary schools may also be a factor.

CHANGES IN CURRICULUM DEVELOPMENT

More players are becoming involved in curriculum development, once the domain primarily of textbook publishers, federally funded projects, universities, states, and large school districts. Restructuring efforts have helped stimulate renewed interest in developing and adapting curriculum locally to meet the needs of students as perceived by their teachers. Rather than relying solely on textbook publishers or national efforts, such as the National Science Foundation programs of the sixties, state departments of education, small publishers, and school districts are embarking on curriculum-development projects large and small. The scope of some of these projects may turn out to be beyond their reach; however, a tremendous amount is likely to be learned about curriculum development as a result.

Smith and O'Day summarize some of the problems associated with today's textbook-based curriculum:

> Diffuse authority structures and multiple goals within the system foster mediocrity and conservatism both in the publishers' supply of curricular materials and in the demand generated by local educators. On the supply side, publishers respond to the lack of consistency and the market-driven approach to materials development in two ways. First, they attempt to pack all the topics desired or required by different locales into the limited space of the typical textbook. As a result, in content areas like science, literature, and social studies, textbooks end up merely "mentioning" topic after topic, covering each so superficially that the main points and connections among them are often incomprehensible to the student. In addition, and... particularly in history and social studies texts, publishers deal with conflicting demands and controversial issues by watering down content, evading sensitive areas, and choosing the least common denominator among the various viewpoints. This approach often leaves the student with so little information or context that he or she is unable to construct his or her own analyses or form his or her own judgments (Tyson-Bernstein 1988, Newmann 1988). (Smith and O'Day 1991, p. 239)

California and Texas signal the changing role of the textbook publishers, though each state takes a different approach. Both states have at one time or another rejected all the books submitted by publishers for adoption (Viadero, January 22, 1992). In Texas a conservative watchdog group uncovered numerous errors in texts. The mistakes ranged from incorrect dates to more serious errors. For example, Sputnik was described as "the first successful intercontinental ballistic missile." After the text publishers reviewed their books and certified them as error-free, reviewers found an additional 160 errors, including statements that the Emancipation Proclamation took effect in 1963 and that Britain owned parts of Mexico in 1753.

The rapid rise of computer networks and the Internet in particular is allowing curriculum development to take on a cast it has never had before. Teachers can now easily and conveniently communicate with one another and with rich resource databases. Some methods of instruction require teacher-generated curriculum, such as problem- or project-based learning. As the overall education and preparation level of teachers continues to rise, and as high-quality staff development becomes more commonplace, more teachers are both capable of and interested in developing curriculum. This is a fundamental change from forty years ago, when teachers often entered the profession without a bachelor's degree and expected to be told how and what to teach.

THE ROLE OF NATIONAL SUBJECT-AREA REPORTS, STANDARDS DOCUMENTS, AND STATE CURRICULUM FRAMEWORKS

Within the past decade, many national reports have been produced on the need to reform core subjects. These reports have stimulated a great deal of discussion among policy-makers and others in education, particularly in state departments of education, with limited impact so far at the school-site level. A notable exception is the *Curriculum and Evaluation Standards for School Mathematics*, issued in 1989 by the National Council of Teachers of Mathematics, which has been adopted in many states as an outline for curriculum development or frameworks. Other examples of the first wave of reports from national curriculum organizations included:

- *Report Card on Basal Readers*, National Council of Teachers of English, January 1988
- *Democracy Through Language*, English Coalition Report, 1989
- *Everyone Counts: A Report to the Nation on the Future of Mathematics Education*, National Research Council, 1989
- *Science for All Americans: A Project 2061 Report on Literacy Goals in Science, Mathematics, and Technology*, American Association for the Advancement of Science, 1989
- *The Reform of Science Education in Elementary School*, National Center for Improving Science Education, 1989
- *Essential Changes in Secondary Science: Scope, Sequence, and Coordination*, National Science Teachers Association, 1989
- *Charting a Course: Social Studies for the 21st Century*, National Commission on Social Studies in the Schools, 1989

- *American Memory: A Report on the Humanities in the Nation's Public Schools*, National Endowment for the Humanities, 1987

All these reports had one thing in common: They recommended reconceptualization of the organization and presentation of key curriculum elements of the various disciplines. Some went further and hinted at new models for structuring the knowledge base of traditional disciplines, and most assumed different goals of teaching that suggested vastly different skills teachers would be expected to master. They were significant for two reasons: first, they helped generate a tremendous amount of discussion among educators within each discipline, and, second, they served as the precursors for standards documents in a number of disciplines. These reports served to provide the conceptual framework within which a number of standards projects operated.

From these reports evolved documents that attempted to identify more precisely what students should know and be able to do. This second wave of documents moved from advocacy of change to specification of desired learning, an ambitious step. This meant the organizations had to define what the results of their reforms would be in terms of student knowledge and skills. These documents included both standards and curriculum. Some identified what students should know and do; others described how teachers should teach these things. Some were broad outlines; others, extremely detailed documents.

Kendall and Marzano (1996) review and analyze these reports and many others in a comparative fashion. They reference the first-wave reports and focus on the second wave, comparing documents prepared in widely diverging formats and styles. They review the evolution and current content of all the central standards documents available in mid-1995. The following sections briefly summarize their analysis of work completed and work in progress as of mid-1996 on curriculum standards nationally in twelve content areas.

MATHEMATICS

The *Curriculum and Evaluation Standards for School Mathematics* (1989) by the National Council of Teachers of Mathematics (NCTM)

> ushered in a new era relative to the role of national organizations in the practice of schooling. Through the Standards document, NCTM helped to form a new perspective on how national subject-area groups can contribute to the improvement of education when it delineated, for three levels (K-4, 5-8, 9-12), a consensus on what students should know and be able to do and how that might best be demonstrated in the classroom.... This document organizes the subject area into five sections, each section provided with up

> to a dozen statements presented as benchmark indicators; material identified by the grade at which it should be introduced and when it should be assessed at both informal and formal levels.
>
> In addition, NCTM has recently published *Assessment Standards for School Mathematics* (May1995), which is organized around six standards that focus on important mathematics, enhanced learning, equity, openness, valid inferences, and coherence. The publication also provides guidelines on the use of assessments for different purposes such as to make instructional decisions, monitor student progress, evaluate student achievement, and evaluate programs. (Kendall and Marzano, p. 3)

SCIENCE

Several important curriculum documents have been produced in science recently, including the *National Science Education Standards* (1995) produced by the National Committee on Science Education Standards and Assessment. This document contains extensive materials related to the recommended standards. Additional chapters address science teaching standards, professional development, and standards for assessment, for programs, and for systems.

The American Association for the Advancement of Science has produced an influential document that is somewhat different in content and structure from many other standards documents. Expanding from the framework the organization created with its 1992 document *Science for All Americans*, Project 2061 contains over sixty science "literacy" goals. The report also contains goals for mathematics, technology, and the social sciences as they relate to and integrate with science. Entitled *Benchmarks for Science Literacy* (1993), the document includes a presentation of the research base used to support the recommended goals. The goals are presented for four levels (K-2, 3-5, 6-8, 9-12).

In addition, the National Science Teachers Association (NSTA) has published *Scope, Sequence, and Coordination of National Science Education Content Standards* (Aldridge 1995) as an addendum to *The Content Core: A Guide for Curriculum Designers* (Pearsall 1993). This organization has also released *A High School Framework for National Science Education Standards* (Aldridge 1995), which contains generalizations in physics, chemistry, biology, earth and space sciences, and other areas organized into a framework.

> Each generalization is described in some detail with a list of the relevant concepts, empirical laws, and theories or models that students will need in order to acquire a solid grounding in the topic. These subsections are presented in grade sequence (9, 10-12) and include a recommended learning sequence. (Kendall and Marzano, p. 4)

HISTORY

History standards have been beset by controversy. They were even attacked from the Senate floor and condemned by a 99-1 vote at one point. Criticism focused on the teaching examples contained in the document rather than the actual performance standards. The three documents produced by the National Center for History in the Schools are *National Standards for History for Grades K-4*, *National Standards for United States History*, and *National Standards for World History* (National Center for History in the Schools 1995).

LANGUAGE ARTS

Efforts to produce national standards in language arts have not been successful to date. Kendall and Marzano review the history of those efforts:

> In the language arts, the Standards Project for the English Language Arts (SPELA) was initially funded.... Beginning in September of 1992, SPELA was designed to be a three-year collaborative effort of the Center for the Study of Reading (CSR), the International Reading Association (IRA), and the National Council of Teachers of English (NCTE). SPELA produced one complete draft of its standards entitled *Incomplete Work of the Task Forces of the Standards Project for the English Language Arts*. That draft contained five strands (Reading/Literature, Writing, Language, Real World Literacy, and Interconnections), each listing two or three standards described at a general level. This draft was to go through a number of iterations until a final document was produced. However on March 18, 1994, the U.S. Department of Education notified SPELA that it would not continue funding for the project. According to NCTE, funding for the project was halted because of a number of "philosophical differences" between SPELA and the federal agencies. These differences included a disagreement over the inclusion of delivery standards, which was supported by SPELA, and the lack of attention to specific canon of children's literature, which was not supported by SPELA. However, the primary reason for cessation of funding appears to be the federal government's assertion that SPELA was not attending to the basic task of identifying what students should know and be able to do in the English language arts. As noted by Janice Anderson, interim director of FIRST [the federal funding agency] at the time funding was halted, SPELA has not made "substantial progress toward meeting the objectives" of the project. The proposed standards, she stated, "are vague and often read as opinions and platitudes," focus too much on process rather than content, and lack "a coherent conceptual framework" ("NCTE/IRA Say Standards Effort Will Continue," *The Council Chronicle*, June 1994). (pp. 5-6)

The NCTE and IRA continued their development efforts without federal funding, eventually producing a document along the lines described above. This project demonstrates the difficulties and tensions involved in creating standards in areas where the content knowledge is not clearly defined, where cultural values come into conflict with teaching methods, and where the measures of success are diverse.

GEOGRAPHY

The Geography Education Standards Project published *Geography for Life: National Geography Standards* (1994). This document is organized around eighteen standards for grades K-4, 5-8, and 9-12, in six areas: The World in Spatial Terms, Places and Regions, Physical Systems, Human Systems, Environment and Society, and The Uses of Geography. Standards are defined at each grade level by three to six activities, with accompanying exemplary "learning opportunities."

THE ARTS

Arts standards were published in 1994 by the Consortium of National Arts Education Associations. The document, prepared by the National Committee for Standards in the Arts and entitled *What Every Young American Should Know and Be Able To Do in the Arts*, contains standards for dance, music, theater, and the visual arts at three levels: K-4, 5-8, 9-12. Each field has from six to nine content standards that span grade levels.

CIVICS

The Center for Civic Education (CCE) published *National Standards for Civics and Government* in 1994. Standards organized around grades K-4, 5-8, and 9-12 organize major areas into over seventy content standards with associated indicators for each standard. The standards are in five areas:

> civic life, politics, and government; the foundations of the U.S. political system; the values and principles of U.S. constitutional democracy; the relationship of U.S. politics to world affairs; and the role of the citizen. Each area is presented as a question, and each of the five outermost questions (e. g., What is government and what should it do?) has more specific questions that organize the content standards beneath them (e.g., What are major ideas about the purposes of government and the role of law in society?). The CCE has also produced a source book of impressive scope

> and detail, *Civitas: A Framework for Civic Education* (Quigley and Bahmmeller, 1991), which contains more than 600 pages of information about civics. (Kendall and Marzano, p. 8)

ECONOMICS

As of mid-1996, work on economic standards was still under way. In April 1995, the federal government decided not to provide funding support to the National Council on Economics in Education, but NCEE chose to continue with funding from private sources. Its 1995 document, *A Framework for Teaching Basic Economic Concepts with Scope and Sequence Guidelines, K-12* (Saunders and Gilliard 1995), provides a likely model for the group's final product.

FOREIGN LANGUAGE

National foreign-language standards were to be available in late 1996 from the American Council of Teachers of Foreign Languages. Most recent drafts are entitled *National Standards for Foreign Language Education* (1995). The standards are organized under five goal areas: communicate in languages other than English; gain knowledge and understanding of other cultures; connect with other disciplines and acquire information; develop insight into own language and culture; and participate in multicultural communities. These are articulated at grades K-4, 5-8, and 9-12, with each goal containing three standards. A rationale statement accompanies each goal and standard, along with sample learning scenarios for each goal by level.

HEALTH

The Joint Committee on National Health Education Standards published *National Health Education Standards: Achieving Health Literacy* (1995). The report contains several standards with rationale statements and performance indicators at grades K-4, 5-8, and 9-11, and is organized by standards and by grade level.

PHYSICAL EDUCATION

The National Association for Sport and Physical Education published *Moving into the Future: National Standards for Physical Education: A Guide to Content and Assessment* (1995). Seven standards with benchmarks at grades K, 2, 4, 6, 8, and 10 include rationale statements, sample benchmarks, and assessment examples.

SOCIAL STUDIES

The National Council for the Social Sciences (NCSS) published *Expectations of Excellence: Curriculum Standards for Social Studies* (1994). This document focuses on the curriculum, specifically the role social studies play in providing an overall curriculum design and comprehensive student-performance standards within which individual disciplines (for example, economics, civics, history) provide specific content and concepts. The document lays out ten "thematic strands" such as culture, time, continuity and change, and individual development and identity. Each theme is accompanied by a list of student performance expectations and associated classroom activities. In all, 241 performance expectations are described.

These reports serve both as resources and reference points for individual, district, and state curriculum-development efforts. For the first time, publishers have clear reference points against which their works can be judged. These initial attempts at specifying desired knowledge and skills will enhance the capacity of a much wider range of people and organizations to develop curriculum, since they need not engage in a lengthy process of developing the structure of the content or a rationale for the standards they propose students master.

This model stands in sharp contrast to the dominant strategies for curriculum development prevalent in the mid- to late-sixties, when large, centralized, university-based projects were the norm. For example, the National Science Foundation sponsored major curriculum-development programs in physics and biology, the School Mathematics Study Group program was being implemented, and Man: A Course of Study was developed and disseminated widely in social studies. These approaches generally employed university-based personnel to define and interpret what essentially all students should know and how they should know it. Implicit in this approach was the notion that learning experiences valid for all types of students in all areas of the nation could be designed centrally, and that teacher involvement in curriculum development was not necessary and might actually be a hindrance.

These reports and the subsequent standards produced by national subject-matter organizations imply much more decentralized curriculum development, within broadly defined parameters. They accordingly called for much greater teacher involvement in constructing and interpreting curriculum as a key strategy to improve student performance, particularly in terms of enhancing the quality and quantity of student thought. The standards encourage diverse interpretation and applications by teachers. They do not define exactly what should be taught or how it should be taught. They are rich resources that present an overall conceptual framework within which extensive curriculum development can be expected to occur at the national, state, and local levels, within subject-matter organizations, colleges and universities, and school districts.

State departments of education have contributed to this environment of permissive curriculum development. Many have moved away from highly structured curriculum systems replete with detailed behavioral objectives, and replaced them with more open "curriculum frameworks." These frameworks define the general goals and progression of the curriculum without specifying each step in the process or the exact content to be taught. Teachers in states with frameworks will have more opportunities to create their own curriculum, in part because most frameworks contain extensive resources and ideas for instruction with them.

Educators will continue to be faced with the problem of finding the time to develop new curriculum and lessons, but for those who are supported in doing so, they will find their task easier than their predecessors did. Such efforts will not eliminate textbooks any time soon, but they will create more alternatives to texts and will hasten the redesign of curriculum that in many cases has seen few changes in twenty or more years.

NEW STRUCTURES FOR VOCATIONAL EDUCATION

Many traditionally "applied" areas of the curriculum are experiencing rejuvenation or even outright reinvention. Programs in business; home economics; wood, metal, and auto shop; electronics; welding; and related subjects have in many respects remained essentially the same since their inception shortly after the turn of the century. They now face a challenge fundamentally different from that faced by "core" academic courses. Vocational/technical courses must transform themselves to survive; they are not able to change incrementally. It will not be enough simply to develop an "improved" woodshop curriculum, for example. The relevance of the subject itself is being called into question.

Gray (1991) describes the challenge faced by traditional vocational-education programs:

> If enrollments are any indication, high school vocational education faces an uncertain future.... [T]he numbers peaked in 1984. Enrollments in

> vocational education are now suffering widespread decline.
>
> It seems like a strange time to suggest that vocational education may be in trouble. Global economic competition has focused attention on the need to improve the quality of the American work force.... However, the very economic forces that should be creating a rosy outlook for vocational education have led to increased graduation requirements and changing student aspirations. Ironically, these forces have put vocational education curriculum at risk. (p. 437)

Gray elaborates on the growing belief that vocational education must be reformed if it is to survive:

> A consensus seems to be developing about the directions such reform should take, starting with a new mission and a new relationship with the total high school program of study....
>
> ...Many of us in the field are proposing that the new mission for vocational education should involve a somewhat radical departure from the past by de-emphasizing preparation for full-time employment and emphasizing instead "tech/prep"—technical preparation for two-year postsecondary technical education—along with the role of vocational education as an important instructional modality for all students....
>
> ...The curricular structure in vocational education has remained virtually unchanged for 80 years. Programs are typically organized around specific occupational titles; the content is determined by observable competencies (typically manipulative in nature) that are determined by a panel of experts to be related to employment in the field. While these competencies have changed over the years in response to changing technology, the basic structure has not. It is time that it did. Two issues seem to transcend all others: instruction should be organized around a broader occupational structure, and the emphasis on academic and workplace literacy skills and content should be increased....
>
> ...The vocational education curriculum should be reorganized around broader—clustered—definitions of work. For example, students interested in technical careers are better served by broad instruction in electromechanics than by narrow instruction in electronics....
>
> Obviously, an increased emphasis on tech-prep calls for an increased academic emphasis. Likewise, there is growing consensus that a loosely defined set of skills—termed "workplace literacy"—may actually be more important than manipulative occupational competencies. (pp. 443-44)

Business courses, with their traditional emphasis on teaching students to use particular business machines and perform basic business tasks, find themselves increasingly unable to keep pace with changes in the workplace. It is difficult enough for schools to respond to the constantly changing technologies employed in the world of work, let alone to deal with the changing roles of workers. While it was once possible to train students in the basic use of a typewriter and calculator, instruct them in dictation and bookkeeping, teach them to write business letters and answer telephones, business teachers now find themselves confronting a workplace where secretaries may be expected to be "executive assistants" with considerable decision-making responsibility, where voice mail takes over a significant amount of the responsibility of a receptionist, where computers directly link executive-level workers, and a letter may be written and delivered without a secretary ever seeing it.

These changing roles and technologies present profound challenges to traditional business teachers, some of whom continue to insist that students learn to type first on electric typewriters, back straight, feet flat on the floor, and wrists arched.

Shop teachers face a similar challenge. Their classes have been a refuge for students who do not perform well in traditional academic courses, with their emphasis on language skills and mastery of abstract concepts. "What will become of these students without the shop?," they ask. Shop teachers can make the case for their programs on other grounds as well. Students can apply math, solve problems, work in teams, be judged on the actual products of learning. All of these points are true, and shop is not a bad experience for children. In a world of unlimited resources, such programs might be retained somewhat longer. The issue facing educators is not the absolute worth but the relative worth of a program. Given the resources allocated to a program in terms of staffing, space, and materials, what is the return on investment? Traditional shop classes no longer produce workers with marketable skills. And even as avocational experiences, their emphasis on obsolete, esoteric, or expensive equipment limits their value for the hobbyist.

Some schools are choosing simply to eliminate these programs, sometimes gradually, sometimes suddenly, rather than reform them. In other places, these teachers are developing new curricula and being retrained to offer hands-on instruction that is academically challenging at the same time. The movement away from specific skills instruction and toward more general technological principles is often described as *applied academics*. Other responses include "tech-prep" education and school-to-work programs.

One example of a curriculum in the tech-prep area, "Principles of Technology," has been adopted widely as a replacement for shop programs. In this curriculum, students must master mathematical and scientific principles and apply them to technological problems. Students build models, solve problems, and find other ways to apply the academic concepts they are learning.

Rosenstock (1991) presents several examples of how vocational programs might be structured:

> Students in an automotive program, rather than learning only repair skills, can learn to establish and operate an automotive shop, study the history of the automobile, examine the transportation industry at large (including public transportation in the community), learn the underlying scientific principles of engine design and artistic principles of body design, and examine the effect of fuel economy on the environment.
>
> Instead of merely learning how to join wood, students in a carpentry shop could consider why a 2" by 4" is actually 1 1/2" by 3 1/2", study the impact of wood harvesting on the economy of underdeveloped countries and—perhaps—learn about the effects of deforestation on global warming. Carpentry students could also study weatherization of homes, redlining practices of banks, community revitalization, workers' rights, zoning regulations, building permits, and all the other aspects of running a construction business. (p. 436)

Home-economics classes often employ a similar strategy, incorporating chemistry into lessons on cooking, or sociology into studies of families. They teach about early-childhood education and, in an increasing number of high schools, offer day care on campus as a "lab" for students to apply their skills. Business programs begin to emphasize "communication" strategies over training in the use of one type of machine. They create "executive internships" that allow students not traditionally drawn to business courses to spend time in the community as an intern to a lawyer, architect, or other professional and receive academic credit for it.

O'Neil (1992a) describes what he calls the "erosion of the longstanding wall separating academic and vocational programs." Academic and vocational teachers create new courses jointly in areas such as algebra, geometry, chemistry, and physics through applied, "hands-on" techniques.

The inevitable result of these curricular adaptations by vocational educators is an overlap between what they do and what is taught in the "core" subjects. Science and mathematics are taught in shop; writing is taught in business; sociology and psychology in home economics. How are issues of credit and curricular continuity resolved when this begins to occur? Which courses should count toward college admission? Particularly with the movement toward applied academic courses, the distinctions between academic and vocational, between core and elective, between thinking and doing, become much less clear. The result of such changes is a challenge to the underlying structure of the high school curriculum in particular, and to the notion that academic classes are the "legitimate" intellectual core of the institution.

SCHOOL-TO-WORK PROGRAMS

School-to-work programs are rapidly developing as alternatives to traditional shop/vocational classes. These programs bring work into the school and take students out of the school to help them make the transition from school to work more gradually and successfully. The curriculum is determined by the workplace and the goals of the particular work experience. Students may be developing generic work-readiness skills, increasing career awareness, and acquiring industry-specific skills over the course of a school-to-work program.

The curriculum is usually developed in concert with members of the business community. The federal government sponsored a series of initiatives in nine states to develop model school-to-work programs in the mid-1990s. Many industry groups have taken it upon themselves to encourage school-to-work programs, as have local private-industry councils, public-private partnerships, and individual schools. Businesses express interest in supporting this type of educational experience, but are only now learning how to accommodate students in the workplace and how to support work-based experiences in the schools, such as simulated work environments and school-based businesses.

One example of a school-to-work program is the career-academy model. These academies are being developed around the nation and have titles such as Academy for Aerospace Technology, Academy of Finance, Academy of Travel and Tourism, Global Business Academy, and Public Service Academy. In these settings, students learn together, sharing several classes each day. Academy students meet together regularly and participate in many decisions about the academy.

Clusters of teachers from both vocational and academic areas have primarily academy students in their classes during specified times. Students take classes that meet high school graduation requirements and, whenever possible, college-entrance requirements as well. In addition, they enroll in occupation-related courses that focus on a career pathway. Work-readiness skills are taught in vocational and academic classes. Work-based learning opportunities are designed to create a linkage between classroom activities and experiences students have with local employers through internships.

Employers participate on an advisory group to the academy. The school district provides a coordinator who is the liaison between the school and businesses. The coordinator helps organize the various work-based learning experiences that allow students to link school and work. Employers provide various types of support, both in-kind and financial, to help make the academy successful.

CHALLENGE FOR TRADITIONAL CORE COURSES

Those who teach required courses find themselves in a potentially difficult position in some respects. They are unlikely to perceive the need to change their curriculum as readily as the vocational teacher. As their colleagues who teach electives begin to modify their programs, introducing relevance, problem-solving, integration and application of knowledge, and real-world experiences, students may wonder why the core academic curriculum does not contain more of these elements.

Wiggins (1991) cites an example from the private sector that illustrates the challenge faced by core-curriculum teachers:

> Specifications should define what it takes to satisfy the customer.... Quality is the customer's perception of excellence. Quality is what the customer says he needs, not what our tests indicate is satisfactory....
>
> This is old news in most vocational programs, athletic departments, and many art, music, and debate classes, but it is unfortunately a novelty in the traditional academic subjects. (p. 24)

Required courses may no longer have a monopoly on student enrollment in states that adopt academic-performance standards as overall organizers for the curriculum. In such systems, many different kinds of learning can prepare a sudent to meet the required standards. For example, traditional vocational or "applied" courses could contain adequate academic material to help students meet a science or math standard. If this is the case, the course's title no longer guarantees it will be filled with students required to check it off a list of requirements. In such an environment, extensive integration of curriculum is not only possible but almost mandatory, particularly if assessments requiring complex thinking and reasoning are employed. Students could attain and demonstrate the necessary skills through many different types of learning experiences, including some that occur outside the classroom and even outside the school.

But college-admission requirements remain to legitimize the core courses in their present form. These requirements are indeed a formidable challenge for curriculum reformers, since many institutions of higher education are only now beginning to engage actively in issues of educational redesign and restructuring (Conley 1996b). Individual professors may have done so, and some campuses or schools of education have sponsored interesting research projects with schools attempting to restructure, but at an institutional level colleges and universities have tended not to become actively engaged in the policy discussions or issues surrounding school restructuring. Perhaps academicians view restructuring as being linked more closely to work-force preparation than to academic achievement.

Ironically, most colleges and universities would maintain that students come to them deficient in many of the precise areas where curricular restructuring is focused. Such deficiencies include students who seem unable to read or write well, who possess poorly developed reasoning skills, minimal problem-solving abilities, little intrinsic motivation or initiative, and apparently little love of learning.

If the types of curriculur innovations described here, combined with other changes in standards, assessment, and instruction, occur with any frequency, the students who graduate from such programs will be different in many important respects from today's students. It will be interesting to see how universities and colleges respond to such students. At the very least, colleges and universities face challenges to the relevance and appropriateness of their own curriculums and teaching methods. They may find themselves accountable for greater change both from students and from others who provide support, including parents and legislators, who will demand to know what a baccalaureate equips a student to do; in other words, what are the standards for a bachelor's degree?

This book is not about higher education restructuring. It is worth noting, however, that a number of state systems of higher education are investigating new methods of admission that focus much more on demonstrated skills and concern themselves less with the precise course titles present on an applicant's transcript (Conley 1994). If momentum for these more proficiency-based admission systems grows, teachers in the core college-prep courses may find they are challenged to adapt their curriculum to ensure their students can meet standards, not merely attend regularly and complete a specified amount of classwork.

THE CHALLENGE FOR TEACHERS

If curricular restructuring is to succeed, it appears that, to varying degrees, all teachers will need to reevaluate the content they teach and the structure of the traditional disciplines. National standards and state curriculum frameworks, combined with advances in information technologies, now make it possible for teachers to be curriculum developers in ways that would have been only a dream as recently as twenty years ago. This new access to a broad array of curriculum sources and resources, combined with an emerging philosophy about the nature of the learning process and the learner's relationship to the curriculum (which are discussed in the next chapter), may drive teachers to rethink and reconfigure the curriculum through literally thousands of small-scale development projects.

The challenge will be to create conditions that allow teachers the opportunity to think, create, and develop the content necessary to keep curriculum in synch with a changing world and keep learners engaged in learning. Teachers then can strive to implement and support a more diverse curriculum attuned to student needs and capabilities. Such a curriculum can meet standards without reverting to the "standardization" of the curriculum that now characterizes American education, what Tyack (1974) refers to as the "one best system."

Teachers will not be able to restructure curriculum without the existence of standards, discussed in the previous chapter, and quality assessment strategies, considered in an upcoming chapter. To have any realistic opportunity to succeed, teachers will need to operate in a system that challenges them to enable essentially all students to master complex content and to apply their knowledge to real problems and situations in order to meet standards. Schools must refrain from expecting teachers to teach everything worth knowing and allow them to concentrate on creating greater depth of understanding among fewer, more universal concepts and topics. The goal ought to be to help students develop the key intellectual and cognitive processes they will need to succeed in new learning situations.

Teachers will need to be able to work across disciplinary boundaries, but still retain the essence of the organization of the disciplines. They will need to be able to rethink assumptions about the importance of knowing versus doing, and the relationship between the two. And they will need to work in partnership with institutions of higher education to demonstrate that student learning can, in fact, be demonstrated more effectively in ways other than grades, course titles, and Carnegie units. Few schools, as they are currently structured, are capable of supporting teachers in these ways. This reality highlights the challenges involved in curricular restructuring.

The dimension of curriculum has been considered early in this discussion, both because of its importance and because of the tendency for it to be overlooked in discussions of restructuring. Closely related in importance and difficulty is the dimension of teacher instructional philosophy and technique, which is considered next.

CHAPTER 11

INSTRUCTION

Most changes in instruction can be subsumed under one overarching concept. It is the notion that learners must be more actively engaged in learning, developing meaning, and taking responsibility.

Examples of this trend abound. They range from whole-language instruction in elementary schools to cooperative learning in secondary schools, community service in high schools, and project-centered and experiential education at all levels. Philosophically, these forms of learning are based on the assumption that learners can and must make decisions about what they learn, and they must process and interpret content individually to make it meaningful. The term used to define this idea that the learner creates meaning in individual ways is called *constructivism*.

WHAT IS CONSTRUCTIVISM?

The notion that individuals create individual meaning out of what their senses process is known as *social construction of reality* in sociology, *phenomenology* in philosophy, and *constructivism* in psychology (Berger and Luckmann 1966, Giorgi 1985, Luckmann 1978, Thines 1977). Educators borrow from these disciplines when referring to "constructivist" conceptions of student learning.

Constructivism can be contrasted with behaviorism, which asserts that an organism is shaped by the stimuli it encounters in its environment, over time. Behaviorism implies that organisms respond in relatively uniform ways to similar stimuli. Constructivism asserts that human beings process stimuli in idiosyncratic ways, resulting in very different interpretations of stimuli, particularly complex stimuli. The brain organizes the response patterns differently from individual to individual. Therefore, it is difficult to predict how an individual will react to a stimulus in any given situation, since each person processes stimuli differently and even the same individual responds differently to different stimuli.

O'Neil (1992b) describes the influence the constructivist perspective has had on curriculum development and reform during the past several years, then summarizes the key elements of constructivism:

> Constructivist views strongly influenced the "whole language" movement in English, the curriculum standards developed by the National Council of Teachers of Mathematics, and new recommendations on effective science practices issued by the National Center for Improving Science Education (NCISE).
>
> The key tenet of constructivist theory, experts say, is that people learn by actively constructing knowledge, weighing new information against their previous understanding, thinking about and working through discrepancies (on their own and with others), and coming to a new understanding. In a classroom faithful to constructivist views, students are afforded numerous opportunities to explore phenomena or ideas, conjecture, share hypotheses with others, and revise their original thinking. Such a classroom differs sharply from one in which the teacher lectures exclusively, explains the "right way" to solve a problem without allowing students to make some sense of their own, or denies the importance of students' own experiences or prior knowledge. (p. 4)

Brooks (1990) describes constructivism as a means for educators to combine two distinct but potentially complementary educational traditions:

> (1) the *mimetic*, in which students are expected to acquire facts and skills from drill and practice exercises, and (2) the *transformative*, a type of teaching that seeks to influence the attitudes and interests of the learners, evoking changes in perspective. In the mimetic tradition, teachers disseminate knowledge, and students receive it. In the transformative, the student is the actor, and the teacher is the mediator [Jackson, 1986]....
>
> Alone, either extreme is insufficient preparation for a world that demands specific knowledge and skills, but also attitudes and interests conducive to vision and creativity.
>
> The primary question for the teacher... is how to help students build a foundation of skills and information while they simultaneously use their creative, intellectual abilities to solve real problems and incidentally develop positive dispositions toward such endeavors. The powerful concept of *constructivism* can help us find solutions to this question.
>
> Constructivists believe that knowledge is the result of individual constructions of reality. From their perspective, learning occurs through the continual creation of rules and hypotheses to explain what is observed. The need to create new rules and formulate new hypotheses occurs when the student's present conceptions of reality are thrown out of balance by disparities between those conceptions and new observations.
>
> Constructivism describes an internal psychological process. In the classroom, students and teachers negotiate both their means of acquiring credibility as members of a group and their emerging understanding of the

> content of the curriculum. These negotiations occur as each participant actively seeks to learn about himself or herself, the other group members, and the content of the course.
>
> In this process, each person is continuously checking new information against old rules, revising the rules when discrepancies appear, and reaching new understandings, or constructions of reality. In psychological terms, the old rules are the existing cognitive structures. When the old rules and the new information collide, the checking process generates cognitive disequilibrium. The revision is the accommodation that occurs when new rules or new internal cognitive structures are required to replace the old ones, which no longer explain reality. The new understandings are stops along the path of learning that occur when equilibrium is temporarily restored. This process occurs in both the teachers and the students, in both academic and social contexts. (pp. 68-69)

Leinhardt (1992) states that when the social nature of teaching and learning are considered, attention must be given to both the knowledge possessed by the individual and the knowledge shared by the group. What kinds and amounts of knowledge students bring to a learning situation cannot be ignored. These factors affect how the student constructs meaning from the material presented. Prior knowledge does not necessarily mean a child's readiness to demonstrate prerequisite skills, but encompasses the depth of understanding and interconnectedness of the knowledge, and the ease with which the child can access it. Knowledge is much more than building blocks of information. It is a complex network of ideas, facts, principles, actions, and perceptions. In the following examples, Leinhardt illustrates the role of prior knowledge and social construction of reality in learning:

> How we read a text is influenced by what we expect (from previous experience) to find there and how that material is parsed. Thus, a headline such as *Vikings Cream Dolphins* has a different meaning depending on whether we are thinking about the eating habits of ancient seafarers or about U.S. football teams. Similarly, if one believes that light emanates from an object (as many naive science students seem to believe), then science textbook diagrams such as those showing dotted lines between the human eye and a perceived object have a different meaning and interpretation than they would if one believed objects are seen because of reflected light. (Leinhardt 1992, p. 21)

Leinhardt explains the core assumptions many modern researchers have about learning and considers the implications of these assumptions for schools as learning communities:

> First, learning is an active process of knowledge construction and sense-making by the student. Second, knowledge is a cultural artifact of human beings: we produce it, share it, and transform it as individuals and as groups. Third, knowledge is distributed among members of a group, and

> this distributed knowledge is greater than the knowledge possessed by any single member.
>
> One pedagogical problem is how to use knowledge of facts, principles, actions, and representations that is available within the group—or classroom—to help individuals and groups gain more knowledge. Proposed solutions include an emphasis on "authentic" tasks.
>
> Another view on this, though, is to consider a school as having its own social system with its own artifacts and sense of authenticity. In such a culture of ideas and meanings, thought and reasoning are valued for themselves, not only for what they can do in the "real world." Both conceptions, however, suggest powerful changes in the dynamics of classrooms, changes that lead to learning. (pp. 23-24)

Brophy (1992) helps create a linkage between the teacher-effects research of the seventies and eighties and the constructivist thinking of the nineties. As one of the leading teacher-effects researchers in the seventies and eighties, he helped identify many specific teacher behaviors that led to enhanced student achievement as measured generally by standardized or criterion-referenced tests. These behaviors and tests, however, "focused on mastery of relatively isolated knowledge items and skill components without assessing the degree to which students had developed understanding of networks of subject-matter content or the ability to use this information in authentic application situations." He notes the limitations of the notion that such teaching and learning is all that should occur in schools and discusses the shift in the focus of current research on subject-matter teaching from the teacher's behavior to the student's vital role in constructing meaning:

> Current research, while building on findings indicating the vital role teachers play in stimulating student learning, also focuses on the role of the student. It recognizes that students do not merely passively receive or copy input from teachers, but instead actively mediate it by trying to make sense of it and to relate it to what they already know (or think they know) about the topic. Thus, students develop new knowledge through a process of *active construction*. In order to get beyond rote memorization to achieve true understanding, they need to develop and integrate a network of associations linking new input to preexisting knowledge and beliefs anchored in concrete experience. Thus, teaching involves inducing *conceptual change* in students, not infusing knowledge into a vacuum. (Brophy 1992, p. 5, emphasis in original)

Brooks and Brooks (1993) present five "guiding principles" of constructivism. These suggest the ways in which a learning environment could be structured to be consistent with the tenets of constructivist learning theory. Such an environment would be characterized by teachers who:

1. *Pose problems of emerging relevance to students.* The teacher guides, or mediates, students' investigations by helping them decide what is a good problem. This often will involve learning relatively fewer things in greater depth, taking the time necessary to explore and comprehend a complex topic based on the students' developmental level. Students must be able to transfer and apply learning in other settings, rather than fragmenting or compartmentalizing it. Students must be encouraged to change their minds when it is appropriate to do so.

2. *Structure learning around primary concepts: the quest for essence.* Concepts are presented to students as wholes that students come to understand by breaking them down into their component parts, rather than the other way around. Teachers transfer responsibility for learning to the learner by encouraging self-initiated inquiry, then providing appropriate supplies, materials, and physical surroundings, then mediating the process. "Structuring curriculum around 'big ideas' and broad concepts provides multiple entry points for students; some become engaged through practical responses to problems, some analyze tasks based on models and principles, and others interpret ideas through metaphors and analogies from their unique perspectives" (p. 58).

3. *Seek and value students' points of view.* This process begins by acknowledging relativity, that other perspectives exist and may be valid ways of comprehending and knowing. Teachers respond to this observation by creating opportunities for multiple points of view to be expressed and valued in the classroom. Students are asked to elaborate, to expand on their initial statements, but without the goal of having the student produce a "right" answer.

4. *Adapt curriculum to address students' suppositions.* Teachers learn how to assist students to examine their untested assumptions and suppositions, rather than simply tell students they are wrong and present them with the truth. Young children have many suppositions that make perfect sense in many respects. It is not the job of education simply to destroy these at the earliest opportunity, but to help students use these early suppositions as a starting point for more complex understandings that students attain themselves, enhancing their confidence in their ability to construct and modify their world view over time.

5. *Assess student learning in the context of teaching.* The focus of assessment moves from "rightness" and "wrongness" to an understanding of the learning process that is taking place in the classroom, so that both teacher and student learn as a result of assessment. Nonjudgmental feedback is one tool to help create such an atmosphere. Another way is to embed assessment within the learning task so that learning and assessing occur in tandem.

CONSTRUCTIVISM AND SCHOOL RESTRUCTURING

Many different approaches to school restructuring contain constructivist elements, either implicitly or explicitly. Sizer's Coalition of Essential Schools lists among its basic principles the notion that the student should be viewed as a worker and the teacher as coach, nonparallel metaphors that convey the idea that the student must have considerably more control over learning. Students are viewed as active participants, not products. The teacher's role as coach implies guidance rather than control as a primary means of garnering desired performance. There is a greater sense of partnership in the endeavor of learning than is engendered by the image of teacher as boss. Sizer (1991) describes the current state of instruction and some of the tradeoffs of giving students more control over learning:

> Today, most of the teachers, rather than the students, "do the work." We present material and expect merely that students will display back to us that to which they had been exposed. Not surprisingly, the kids forget much of what they learned in a matter of months. They were not engaged. They did not have to invent on their own. They saw little meaning to their work.
>
> So,... we must change the curriculum from display-of-content to *questions-that-ultimately-provoke-content*. Press the kids to do the work, to solve the problems presented. The cost? It takes longer to provoke kids to learn for themselves than it does to deliver content to them. The differences among the students become glaringly manifest when each is made to perform. A teacher cannot, thus, easily plan to "finish Mao Tse-tung by Friday"; the kids don't all master the matter at precisely the same rate. (p. 33, emphasis added)

This idea of deriving the curriculum in some measure from the questions or interests of the learner represents a fundamental departure from the thinking that prevailed in the late seventies to mideighties, an era in which behavioral objectives defined the structure of learning and teaching to a significant degree.

McCune (1988) presented similar ideas in her early descriptions of how instruction in a restructured school would differ from instruction in a traditional setting:

- Schools must extend the methods of instruction and provide a significantly greater amount of time in interactive activities.
- Schools must move away from the teaching of facts as the outcomes or ends of the learning process and use facts as the means for developing information-processing skills.
- Schools must help students to relate information across subject areas and to real-world issues.

It is important to note that constructivist notions of learning do not imply that students will simply play at learning, retaining whatever they might glean from their activities. The goal is not simply to make learning enjoyable, though that can be a frequent collateral outcome. The goal is to cause students to learn and develop deeper understanding and greater retention of the concepts they come to understand and the knowledge they employ to achieve understanding. The movement toward high-content curriculums can succeed only if instructional techniques that foster greater comprehension and retention are also employed.

According to Lewis (1991), instruction in a school with a high-content curriculum has the following characteristics:

> - *Consciously teaches higher order thinking skills.* [Joyce] Epstein's research on eighth graders concludes that "students generally benefit in skills and behavior in math and English from higher level math instruction and more difficult reading and writing activities."
> - *Constructs active learning opportunities.* Students need to be discovering, rather than receiving, knowledge. Teachers need to be coaches and facilitators.
> - *Makes greater use of original source materials.* High content minimizes the dependence on textbooks, especially because they do not usually contain rich multi-perspectives on the curriculum for urban students. Using richer resources for instruction also supports the first two points, allowing students to deal with higher order thinking and become active researchers themselves.
> - *Integrates and interrelates subjects and disciplines.* Early adolescents' cognitive growth leads them to integrate their knowledge, to get meaning from a whole perspective. Working across disciplines, teachers can match the other three characteristics of high content instruction to the development of their students. (pp. 62-63)

What is interesting about the current movement to reshape schooling is that the recommendations being espoused by educational reformers have some similarities to those being presented by the business community and governmental leaders calling for changes in teaching and learning—both have elements of constructivist notions to some degree.

For example, consider the report discussed earlier, *Workplace Basics: The Skills Employers Want*, prepared in 1990 by Carnevale, Gainer, and Meltzer for the American Society of Training and Development and the U.S. Department of Labor's Employment and Training Administration. Its description of the new "basic skills" for American workers is similar to the types of things many progressive teachers have been trying to do for years. It seeks to develop employees who know how to learn and are motivated to do so, who can listen and convey a clear response, who have positive self-esteem and personal goals, who can get along with their peers, and who demonstrate leadership and motivation in their interaction with peers.

These behaviors describe learners in firm control of their own learning, who possess initiative, and who are actively participating in the construction of their learning and of their social reality. If students have opportunities to explore and practice such skills during their formal public education, there is a greater likelihood that they will demonstrate those skills in the workplace. The implications are profound for a system of education that for most of its history has been working on perfecting mechanisms for controlling individual behavior and thought. It should be carefully noted that the implications for the workplace, which has had similar goals, are at least as profound, and that many employers may not really want workers who think critically, any more than educators may.

It would be naive to suggest that there is anything approaching complete congruence between the agendas of educational reformers and business leaders. Many business people still value the "practical" dimensions of education and assume the need for a strong emphasis on "basic skills," though the definition of these basic skills is shifting, as noted. However, the potential for significant dialogue between educators and business people regarding what constitutes effective educational practice appears at least possible if not promising.

EXAMPLES OF CONSTRUCTIVIST INSTRUCTIONAL PRACTICES

Many examples of changes in instructional practice that reflect the incorporation of constructivist perspectives could be offered. Cooperative learning represents a case in point. Its popularity has soared during the past decade. It has had to overcome concerns that it would undermine traditional American values of competition, that individual students would not be accountable for their own learning, and that high-achieving students would be dragged down or held back by the group. It appears that teachers who adopt cooperative learning have been able to respond successfully to these concerns.

Cooperative learning is an example of a teaching strategy that helps teachers adapt to more heterogeneous groups of students, and at the same time the strategy produces solid gains in achievement and prosocial behavior (Slavin 1990c). Traditional teaching techniques do not seem to have the same potential for enabling essentially all students to achieve successfully in school. If schools want all students to succeed and be able to demonstrate their learning in terms of what they can do, not just what they know, techniques such as cooperative learning will be central to the achievement of this goal.

Slavin (1991), in a review of the research on cooperative learning, presents the following summary of the effects of cooperative learning based on an examination of high-quality research studies:

> Overall, of 67 studies of the achievement effects of cooperative learning, 41 (61 percent) found significantly greater achievement in cooperative than in control classes. Twenty-five (37 percent) found no differences, and in only one study did the control group outperform the experimental group. (p. 76)

These changes in instructional theory and technique have implications for staff development and teacher retraining that have not been addressed adequately by reformers. Slavin suggests that only 10 percent of teachers are employing cooperative learning (Willis 1992). Such a low level of adoption of a teaching technique that has clear power to improve upon current practice, after nearly a decade during which high-quality training in the technique has been available, illustrates the magnitude of the challenge facing education. If the 1990s are to be a decade during which teachers transform their instructional practices to ensure that essentially all students can perform at high levels, how can current practice and best practice remain so far apart?

Whole-language approaches to literacy development are another example of the application of constructivist notions both to curriculum and instruction in an integrated fashion. The organizing principle of whole-language instruction is individual interpretation and meaning-making by the learner. The teacher facilitates learning through the creation of environments and experiences that allow the learner to make choices, construct meaning, create products, and extend understanding, in both individual and social settings. This method can be contrasted to structured approaches to reading instruction, as represented by basal reader series, that define and control the nature and pace of understanding of material for students.

Many other instructional techniques contain constructivist elements, and interest in these techniques appears to be increasing, based on discussions at professional conferences and articles in subject-area journals. Examples of these techniques include

- *personal goal setting*, where learning is based on the goals of the learner or at least where the learner must describe the learning experience in relation to personal interests

- *simulations and role-plays*, which by their very nature engage students actively and are based on student interpretation and meaning-making
- *project-centered learning*, a technique that has been popular with gifted and talented students for some time (for example, science fairs and programs such as Odyssey of the Mind) and is based on student-developed projects as the focal point both for instruction and assessment
- *case-study approaches*, including problem-based learning, where students are presented a body of information that describes a real-world situation and must answer questions and solve problems related to the situation
- *work-based experiences*, community service, internships, job shadows, and other methods that engage the student directly with the world outside the school, giving each child a unique experience
- *other forms of "situated learning" or "contextual learning"* where the student engages in learning-by-doing under the guidance of the teacher or other adult with expertise

These techniques all argue for student involvement and engagement in learning at a much higher level than direct-instruction techniques prevalent in perhaps most American classrooms. Such approaches appear particularly promising (in combination with well-designed and well-implemented uses of direct-instruction techniques) as vehicles to engage at-risk youth and to enable them to develop the more sophisticated thinking skills and social strategies necessary for success beyond school.

CHALLENGES THAT CONSTRUCTIVISM FACES

Constructivism faces several major challenges. The theory itself is complex and somewhat difficult to transfer into practice, particularly when contrasted with behaviorism, which lends itself to step-by-step educational programs more easily followed by educators. Many of those who advocate constructivism have become "cheerleaders" and do not base their recommendations firmly in research findings or the reality of schools and children. Some people wonder if constructivism is advocating a kind of moral relativism, an "anything goes" view of the curriculum whereby learners can reach any conclusions they like simply because they "construct" it personally. Others express concerns that constructivism is poorly suited to basic-skills instruction and to the needs of students who require more structure and accountability in the classroom.

Another problem has been the tendency to view constructivist and behaviorist learning theories as a dichotomy. Human learning naturally contains elements of both theories in varying combinations, depending on the situation and the nature of the material to be learned. Human beings order and retain information in a variety of ways. Therefore, it makes sense for schools to employ a range of instructional strategies rather than to adopt a philosophical position and pursue it regardless of its effects on students. This is probably true for any philosophical position.

Some parents and community members believe that the curriculum should reflect clearly agreed-upon facts and ways of thinking about things that all young people should internalize. Those who hold this point of view worry that, under the guise of constructivism, schools are telling children to reach any conclusion they wish about any topic. In situations where the home and community have clear beliefs that are not to be questioned, people may feel threatened by what they perceive as relativism.

An extreme interpretation of constructivism can cause chaos in classrooms where students naturally seek guidance, both in terms of the specific things they are to do, but also in terms of how they are to think. Schools may say they do not teach values, but education is impossible without values, even if they are only concepts such as courtesy, honesty, civility, and cooperation.

There is a natural tension between constructivism and "absolutist" educational philosophies that must be acknowledged. At some levels the differences are not resolvable. At others they are. Students can be taught to identify moral dilemmas and to use their own values to reach decisions in such situations. A constructivist approach can decrease the "dogmatic" view of science and the "absolutist" view of certain scientific theories held by academics and some educators. When students are allowed to reach their own conclusions, they are just as likely to reaffirm their values as to question them. Constructivist curriculum can coexist with more absolutist belief systems, if the limits of each are delineated clearly and educators, parents, students, and community members agree generally on those boundaries.

Constructivism requires much of teachers as well. They must be sophisticated curriculum developers or adapters for this approach to succeed. By definition, textbooks are not adequate teaching tools for constructivist learning environments. Most teachers lack the time to create the conditions under which a wide range of learners can create personal meaning. Furthermore, those learners tend to consume learning experiences and materials at a rapid rate when they are operating in a constructivist mode.

Exactly the opposite can occur as well. Teachers may either not understand constructivism or perhaps cynically employ it as a rationale for simply letting students do what they please. These teachers may not plan at all, under the guise that the students have to create the meaning. When this occurs, teacher accountability is reduced, and the blame is often placed on the students for their lack of achievement.

Beyond this set of challenges lie others. Current testing programs are based on the assumption that everyone has been taught roughly the same things and, as a result, can be expected to know roughly the same things. From a constructivist point of view, all students might be exploring the same topic, but they would not all be expected to learn the same things as a result. This creates problems when the standardized tests come into play. It creates similar problems when trying to sequence a curriculum (such as a second language) where the teacher may need to know that certain things have been learned.

Those who understand constructivism fully point out that it is still possible, indeed necessary, for the teacher to provide the overall structure of the learning and for learners to emerge with similar knowledge and skills, even if they follow different paths toward some common goal. This key distinction is lost on many who assume that students construct meaning without any overall structure within which they process learning experiences.

A skillful teacher provides a structure wherein students' constructions lead them to similar skill development. In writing, for example, where there are many things about which students can write (construct personal meaning), there is also a common technology and structure (grammar, syntax, and so forth) that must be present in every personal construction. In mathematics, students might choose a range of interesting problems to investigate and then reach individual solutions. But each student must draw from the same algorithms and rules in order to structure the problems. Students may need structured instruction to master the basic tools of computation. Such instruction can occur simultaneously with problem-solving, with the sophistication of the problems and independence of the learner increasing as basic mathematical tools are mastered.

Reading is perhaps more controversial because of the split between phonics and whole language. But even here, many phonics programs acknowledge the importance of moving beyond drill-and-practice to the construction of meaning as students begin to read more complex texts. Unfortunately, some constructivists overlook the need many students have for a structure, a scaffold, within which they can acquire specific decoding skills, tools they can use subsequently to create and construct meaning.

Constructivism is a sophisticated concept, one that requires a skilled teacher and a supportive educational environment. Its effects are not often as immediate as more behavior-based instructional methods, and, as will be discussed in the next chapter, the assessment methods are nowhere near as well developed as those for behaviorally oriented teaching.

Ironically, many of the current and emerging technologically based methods of learning are inherently constructivist in nature, and cannot be pursued using behaviorist methods. Finding the proper mix between behaviorist and constructivist learning models is a process educators have just begun, one that is causing considerable conflict within schools and communities unfamiliar with the uses and requirements of constructivism.

The difficulty with a movement toward constructivist notions of learning is not merely the task of equipping teachers with new strategies, though this alone is a significant challenge. For a school to adopt constructivist principles fully requires "restructuring" of teaching and learning at a fundamental, not a surface, level. Will teachers come to accept the notions that it is all right not to "cover" the entire curriculum, that students will not "know" exactly the same things at the conclusion of a course, that the student is actually in charge of the learning process in a fundamental sense, and that the teacher's most promising role is that of facilitator?

These are profound shifts in the frames of reference of people who function within an institution that allows them to maintain relatively stable world views (Pace 1992). The challenge is not just to transform practice, but to restructure basic assumptions about learning and learners. The difficulty of this transformation should not be underestimated.

ASSESSMENT

It may appear a bit jarring to separate the discussion of standards from that of assessment by the two intervening sections on curriculum and instruction. A case can certainly be made that there is a very close linkage between outcomes and assessments, which there is. At the same time, the two should not be confused.

An assessment determines achievement of a standard, and there can be many ways to do this. The standards themselves, however, serve to drive decisions about curriculum, instruction, and other related processes. The process of identifying standards, in the model being described here, precedes these other decisions, including the choice of assessments. In reality, this is rarely the case, since curriculum, instruction, and assessment already exist.

Once standards have been established and agreed upon, discussions of the proper assessment tools can take place in a more informed environment. Assessment can be designed so they provide useful information to teacher, student, and parent about performance relative to district (or state) standards, to district curriculum objectives, and to individual learner goals. This rational, linear approach is rarely followed, in part because standards and assessments exist *de facto*, even if they are not adopted in some formal fashion. The fact they already exist means that any changes in these areas have immediate, direct implications for teaching and learning practices. The adoption of standards and assessments aligned with the standards signals changes in curriculum and instruction.

If the types of changes in curriculum and instruction that have been described in preceding sections take hold in American education, they will be accompanied by changes in assessment of a similar magnitude. If new ways to measure content knowledge and cognitive skills are not developed, the effects of new curriculum and instructional methods will not register very well on current tests, the limits of which are discussed next.

SOME LIMITS OF CURRENT ASSESSMENT APPROACHES

The current testing technology, from the classroom to the national level, is built largely on assumptions about the curriculum and methods of instruction employed in classrooms that may no longer be as universally true as they once were (Bradley, April 5, 1995). Most current tests are designed to provide an accounting of the factual information retained by students. These methods of testing are based on considerations of efficiency and have close ties to the behaviorist notion that all learning can be disaggregated into a series of measurable units and that the sum of the performance on the subunits accurately measures the full scope of what is known by the student. These tests may have high reliability (that is, perform similarly in different situations) but low validity (they may not measure what is actually being taught); in other words, they tell us a great deal about things that may have very little to do with what students actually know and are able to apply. They provide little insight into the ways in which discrete pieces of information are combined, or integrated, by the learner to solve real-world problems or to serve as the stepping stones to new learning experiences.

O'Neil (1992b) describes how behaviorist notions affected the ways in which instruction has been organized and assessed:

> Popularized by B.F. Skinner and others, the behaviorist view of learning, when translated by schools, was characterized by lengthy lists of measurable behavioral objectives and tightly sequenced curriculums. Knowledge and skills were broken down into smaller and smaller bits, under the assumption that mastering simpler steps would add up, in the end, to complex thinking. These "bits" tended not to be placed in the context of an authentic problem situation, and students had difficulty applying what they had learned in new contexts. Little attention was given, moreover, to the conceptions and misconceptions that learners held about the skills or knowledge being introduced; so misconceptions frequently resurfaced after the learning task concluded. (p. 4)

These concerns are confirmed by the results from a three-year $1 million study sponsored by the National Science Foundation and conducted by researchers at Boston University (Rothman, October 21, 1992). The study reviewed standardized-achievement tests and the tests contained in textbooks through the use of three strategies: (1) an item-by-item analysis of the six most widely used standardized-achievement tests along with a sample of textbook tests in science and math in grades 4, 8, and high school; (2) a questionnaire administered nationwide to 2,229 math and science teachers in grades 4-12; and (3) interviews with 199 math and science teachers and 90 building-level administrators in six urban districts. The researchers found that the tests emphasized thinking and content at the levels of knowledge and comprehension. Very few questions measured conceptual knowledge, problem-solving, or other forms of higher order thinking.

Darling-Hammond and others (1995) offer a critique of traditional standardized testing, citing their limitations in a series of areas:

> Standardized Tests Are Limited Measures of Learning
>
> Multiple-choice tests do not evaluate student performance on actual tasks, such as reading, writing, or problem-solving in various subject areas, and they are poor measures of higher order thinking skills....
>
> Most traditional standardized tests do not reflect current understandings of how students learn. They are based on an outmoded theory of learning that stresses the accumulation and recall of isolated facts and skills. They do not reflect current knowledge that people learn in meaningful and purposeful contexts by connecting what they already know with what they are trying to learn (Gardner, 1993; Kantrowitz & Wingert, 1989; Resnick, 1987). "Thinking skills" are the foundation for building "basic skills," not the other way around, as many testing programs assume. Furthermore, real skills must be demonstrated in complex performance contexts, not on tasks demanding only recognition of discrete facts.... (p. 6)
>
> Overuse of Such Tests Narrows the Curriculum
>
> Because test scores are used for so many different purposes, they often exert great influence on what is taught, leading to a narrowing of the curriculum.... This leads to an overemphasis on superficial content coverage and rote drill on discrete skills at the expense of in-depth projects and other thought-provoking tasks that take more time.... (p. 7)
>
> Standardized Tests Are Poor Diagnostic Tools
>
> Because most traditional standardized tests provide only a limited measure of a narrow aspect of learning or development, they are poor predictors of how students will perform in other settings, and they are unable to provide information about why students score as they do.... This promotes a view of children as having deficits that need to be remediated rather than as having individual differences, approaches to learning, and strengths that can be supported and developed....
>
> An additional factor contributing to the inadequacies of standardized tests for diagnostic and placement purposes is that they do not reflect or capture the diversity of students' backgrounds and experiences. Because they often contain assumptions and facts that are grounded in the context of the dominant culture—and fail to include relevant forms of knowledge from other cultures—the tests place students from nondominant cultures at a disadvantage in demonstrating what they know and can do (Garcia & Pearson, 1994; Medina & Neill, 1988). (p. 7)
>
> Influences of Tests on Teaching and Learning
>
> These shortcomings of American tests were less problematic when they were used as only one source among many other kinds of information

> about student learning, and when they were not directly tied to decisions about students and programs. However, as test scores have increasingly been used to make important educational decisions, their flaws have become more damaging....
>
> The results of this phenomenon can be seen in U.S. students' performance. Since about 1970, when standardized tests began to be used for a wider variety of accountability purposes, basic skills test scores have been increasing slightly while assessments of higher order thinking skills have declined in virtually all subject areas. Officials of the National Assessment of Educational Progress (NAEP), the National Research Council (NRC), and the National Councils of Teachers of English and Mathematics (NCTE and NCTM), among others, have all attributed this decline in higher order thinking and performance skills to schools' emphasis on tests of basic skills....
>
> More than a decade ago, the NAEP attributed its finding that only about 5%-10% of high school students can actually explain or defend their points of view to the fact that most reading tests emphasize short responses and lower level cognitive thinking (NAEP, 1981). (p. 8)

AUTHENTIC ASSESSMENT AND SOME ATTEMPTS TO DEVELOP MORE AUTHENTIC ASSESSMENT TOOLS

Many terms have been applied to the newly emerging forms of assessment, but the term *authentic assessment* has been used rather broadly by those engaged in developing alternative methods of assessment.

> These alternatives are frequently called "authentic" assessments because they engage students in "real world" tasks rather than in multiple choice exercises, and evaluate them according to criteria that are important for actual performance in that field (Wiggins, 1989). Such assessments include oral presentations or performances along with collections of students' written products and their solutions to problems, experiments, debates, and inquires (Archbald and Newmann, 1988). They also include teacher observations and inventories of individual students' work and behavior, as well as of cooperative group projects (NAEYC 1988). (Darling-Hammond and others 1995, p. 10)

If expectations for student learning shift from measuring what students can repeat to demonstrating what they can do, the technology of testing will have to shift or evolve accordingly. This process of developing new methods, though still in its infancy, has made impressive strides lately.

Experts in the field of assessment suggest that five years may be a minimum period necessary to develop new assessment tools (Rothman, March 20, 1991). Eva Baker, codirector of the federally funded Center for Research on Evaluation, Standards, and Student Testing, believes it will take from five to ten years to develop and implement this new technology. She expresses concern over the ability of teachers to learn and implement new measurement techniques in the context of their existing responsibilities.

> This strategy, however, assumes that development must be done by large research centers under the support of multimillion-dollar grants. While this sort of development effort may be valuable, particularly for creating alternatives to standardized achievement tests, it is likely that much, perhaps most, of the development work on new assessment techniques will take place at the state and district levels. The U.S. Department of Education is encouraging this effort through its support of the State Alternative Assessment Exchange, which is housed at the Center for Research on Evaluation, Standards, and Student Testing and cosponsored by the Council of Chief State School Officers. The exchange provides a central database and clearinghouse for alternative assessment strategies developed by states. (Rothman, March 13, 1991)

School districts and schools are experimenting with methods of alternative assessment. This is not as unreasonable as it might first appear; if the results are not to be used for comparison between and among school buildings or districts, that is, if they are not high-stakes tests, then there is considerable latitude in the technical standards that need be applied to such development projects. If the data from the tests are going to be used by districts primarily for internal decision-making and for program improvement, then entirely different processes can be employed to develop these tests. Teachers can become much more centrally involved in assessment design to ensure that the results of assessments are of value to teachers.

This is not to say that standards of reliability and validity should be abandoned. In fact, teacher involvement can help improve validity in particular by helping to identify what needs to be assessed early in the design process. In the debate on assessment, it is becoming increasingly clear, however, that slavish adherence to the illusion that current assessment tools are objective and rational can be dangerous. Data from those assessments can be used as the basis for program decisions and, in some unfortunate cases, student academic placements. Test-makers are not necessarily to blame, since they often inform school personnel of the limitations of their instruments. And teachers, for their part, often find themselves in the unenviable position of either using marginally relevant test data or using no test data at all as the basis for making decisions. They cannot be faulted for selecting what often appears to be the lesser of two evils.

EXAMPLES OF ASSESSMENT STRATEGIES

While large-scale projects are being undertaken by states, universities, and large research centers to develop new performance standards and new assessment tools and strategies, many educators at the district and school-site levels are actively involved in creating their own standards and assessment methods. They are not content to wait until the large-scale projects, with their long timelines for development and their tendency to produce a horse by committee, are ready for use.

Two school-based research projects (Rogers and Stevenson 1988) explored a variety of techniques for assessing student work. Assessment on a fifth-grade social studies unit included the following methods:

- *Small-group interviews.* In small group discussions with an adult, students are asked to explain what they have learned. The level of student understanding is probed and explored through these discussions.
- *Situational pictures.* Children view a picture of a situation that illustrates the conflict caused by the application of some right (a nativity scene on public property being taken down two weeks before Christmas), and are asked to discuss its significance and meaning.
- *Card sorts.* Students are provided information about key governmental roles and institutions and are asked to sort them into piles labeled "most important" and "least important," and to provide a rationale for the decisions they make.
- *Learning logs.* Students describe in a notebook the most important thing they learn each day, identify areas where they are confused, and so forth.
- *Leader snapshots.* Students view pictures of key government figures and then attempt to identify them and tell what they do.
- *Open-ended versions of conventional tests.* Students provide extended explanations to more traditional questions. After answering an agree/disagree question, students list examples and provide justification for agreeing or disagreeing. (pp. 69-70)

The alternative strategies used to assess student learning from an eighth-grade unit on the poet Robert Frost were of a very different nature. A series of longitudinal tests and interviews was employed. Beginning with a test given immediately following the completion of the unit, researchers returned periodically throughout the semester and readministered elements of the original test. They also interviewed students. The results of this procedure provided insight into what students actually retained over time from a unit where they scored well on the initial posttest. In addition, the assessment captured student perceptions and motivations related to the learning experience. This type of information is useful, not only to students, but to teachers, who can use the feedback the next time they prepare to teach the same material. Teachers often lack this type of information and mistakenly interpret the posttest results as an accurate gauge of student learning, as do the students.

A strategy that involves public demonstration of work by groups of students is exemplified by the Rural Educational Alliance for Collaborative Humanities (REACH) Program's use of an exposition for students from ten project sites to display their work (Barone 1991). The REACH Program encouraged students to explore their personal and community history and the culture of their rural community to help foster a sense of connection among the students, the school, and the community. Students produced writings, interviews, dramatic presentations, and media productions. These were presented at a two-day "exposition," along with portfolios demonstrating student work such as poetry, stories, and collections of essays that demonstrated the students' progress.

Portfolios of student work have been proposed as a potentially powerful tool for gauging student growth, encouraging self-analysis, and helping students to develop a sense of ownership and pride in their work. Paulson, Paulson, and Meyer (1991) provide guidelines for schools that are interested in using portfolios to reflect student progress:

1. Developing a portfolio offers the student an opportunity to learn about learning. Therefore, the end product must contain information that shows that a student has engaged in self-reflection.

2. The portfolio is something that is done by the student, not to the student. Portfolio assessment offers a concrete way for students to learn to value their own work and, by extension, to value themselves as learners. Therefore, the student must be involved in selecting the pieces to be included.

3. The portfolio is separate and different from the student's cumulative folder. Scores and other cumulative folder information that are held in central depositories should be included in a portfolio only if they take on new meaning within the context of the other exhibits found there.

4. The portfolio must convey explicitly or implicitly the student's activities; for example, the rationale (purpose for forming the portfolio), intents (its goals), contents (the actual displays), standards (what is good and not-so-good performance), and judgments (what the contents tell us).

5. The portfolio may serve a different purpose during the year from the purpose it serves at the end. Some material may be kept because it is instructional, for example, partially finished work on problem areas. At the end of the year, however, the portfolio may contain only material that the student is willing to make public.

6. A portfolio may have multiple purposes, but these must not conflict. A student's personal goals and interests are reflected in his or her selection of materials, but information included may also reflect the interests of teachers, parents, or the district. One purpose that is almost universal in student portfolios is showing progress on the goal represented in the instructional program.
7. The portfolio should contain information that illustrates growth. There are many ways to demonstrate growth. The most obvious is by including a series of examples of actual school performance that show how the student's skills have improved. Changes observed on interest inventories, records of outside activities such as reading, or on attitude measures are other ways to illustrate a student's growth.
8. Finally, many of the skills and techniques that are involved in producing effective portfolios do not happen by themselves.... [S]tudents need models of portfolios, as well as examples of how others develop and reflect upon portfolios. (pp. 61-63)

HOLISTIC ASSESSMENT WITH RUBRICS

Another popular method of integrated performance assessment is holistic assessment. Generally applied to writing samples or student demonstrations in which it is important to consider the learning as a whole rather than as a series of component parts, holistic assessment generally relies on the use of a scoring rubric to determine student performance. The rubric contains specific descriptions of behaviors and evidence of performance an observer can use to analyze and categorize the student's performance along a continuum, usually designated by a numeric scale of 1 to 5, with five representing the highest, most competent, and most complex level of performance.

One of the advantages of the rubric method of scoring is that it can be developed and applied by teachers. The behaviors identified as the focal point for observation in most rubrics are ones that can be grasped relatively easily by educators, students, parents, and community members. They also can generate discussion about what it is students should know, and at what levels and by what means they should demonstrate mastery of this knowledge.

An advantage of using rubrics is that they signal the outcomes necessary for success beforehand; learners don't have to guess what they must do to be successful. Furthermore, the rubric can be applied to preliminary drafts or be used throughout a course of study to provide formative feedback to the learner indicating clearly what he or she must do to improve performance. Such feedback can be more valuable and useful than a score of 64 or 72 on a test.

The standard for success is identified before the fact, as well. A 3 on a scale of 1 to 5 might be designated as meeting the school's standards for mastery. Schoolwide profiles of student performance that are more descriptive than test scores can be developed and provided to teachers to help them pinpoint deficient areas to be addressed in the future. Schoolwide profiles also enable parents to understand what students can and cannot do as demonstrated by the assessment. This knowledge helps in the process of identifying school-improvement goals.

Mark Twain Elementary School in Littleton, Colorado, created a rubric to judge written reports produced by fifth-graders as one element of an assessment process that also required them to research a topic, create a visual presentation relevant to the research topic, and deliver an oral presentation three to five minutes in length. Each element of the process was assessed separately, and a separate rubric was employed to assess the oral presentation as well. The written report was assessed employing the following five-point rubric:

> 5 - *Excellent*: The student clearly describes the question studied and provides strong reasons for its importance. Conclusions are clearly stated in a thoughtful manner. A variety of facts, details, and examples are given to answer the question, and provide support for the answer. The writing is engaging, organized, fluid, and very readable. Sentence structure is varied, and grammar, mechanics, and spelling are consistently correct. Sources of information are noted and cited in an appropriate way.
>
> 4 - *Very Good*: The student adequately describes the question studied and provides reasons for its importance. Conclusions are stated in a thoughtful manner, but with less clarity and insight than in an Excellent rating. A sufficient amount of information is given to answer the question, and provide support for the answer. The writing is engaging, organized, and readable. Sentence structure, grammar, mechanics, and spelling are generally correct, and sources of information are appropriately noted.
>
> 3 - *Good*: The student briefly describes the question and has written conclusions. An answer is stated with a small amount of supporting information. The writing has a basic organization although it is not always clear and sometimes difficult to follow. Sentence structure and mechanics are generally correct with some weaknesses and errors. References are mentioned, but with some adequate detail.
>
> 2 - *Limited*: The student states the question, but fails to fully describe it. The answers and/or conclusions given are vague, and basic information may be lacking. The writing generally lacks organization and is difficult to follow. There are many errors of sentence structure and mechanics. References may or may not be mentioned.
>
> 1 - *Poor*: The student does not state the question. No answer or conclusion is given. The writing is disorganized and very difficult to read. Sentence

> structure and mechanics are consistently weak. References may or may not be mentioned.
>
> 0 - *No written report is made.* ("Mark Twain Elementary: The Peak Performance School," Littleton Public Schools)

PERFORMANCE DEMONSTRATIONS

The performance demonstration is yet another form of holistic assessment. Walden III, an alternative school in Racine, Wisconsin, with a long history of performance assessment, has developed what they title a "Right of Passage Experience" (ROPE). This process has served as a model for other schools. The model contains the following dimensions:

> All seniors must demonstrate mastery in fifteen areas of knowledge and competence by completing a portfolio, a project, and six other presentations before a ROPE committee consisting of staff members (including the student's home room teacher), a student from the grade below, and an adult from the community. Nine of the presentations are based on the materials in the portfolio and the project; the remaining six presentations are developed especially for the presentation process.
>
> *The Portfolio*: The portfolio, developed during the first semester of the senior year, is intended to be "a reflection and analysis of the graduating senior's own life and times." Its requirements are:
>
> 1. *A written autobiography*, descriptive, introspective, and analytical. School records and other indicators of participation may be included.
> 2. *A reflection on work*, including an analysis of the significance of the work experiences for the graduating senior's life. A resumé can be included.
> 3. *Two letters of recommendation* (at minimum) from any sources chosen by the student.
> 4. *A reading record* including a bibliography, annotated if desired, and two mini-book reports. Reading test scores may be included.
> 5. *An essay on ethics* exhibiting contemplation of the subject and describing the student's own ethical code.
> 6. *An artistic product* or written report on art and an essay on artistic standards for judging quality in a chosen area of art.
> 7. *A written report analyzing mass media*: who or what controls mass media, toward what ends, and with what effects. Evidence of experience with mass media may be included.
> 8. *A written summary and evaluation* of the student's course work in science/technology; a written description of a scientific experiment

illustrating the application of the scientific method; an *analytical essay* (with examples) on social consequences of science and technology; and an *essay on the nature and use of computers* in modern society.

The Project: Every graduating senior must write a library research-based paper that analyzes an event, set of events, or theme in American history. A national comparative approach can be used in the analysis. The student must be prepared to field questions about both the paper and an overview of American history during the presentations, which are given in the second semester of the senior year.

The Presentations: Each of the above eight components of the portfolio, plus the project, must be presented orally and in writing to the ROPE committee. Supporting documents or other forms of evidence may be used. Assessment of proficiency is based on the demonstration of knowledge and skills during the presentations in each of the following areas:

1. *Mathematics knowledge and skills* are demonstrated by a combination of course evaluations, test results, and work sheets presented before the committee, and by the ability competently to field mathematics questions asked during the demonstration.
2. *Knowledge of American government* should be demonstrated by discussion of the purpose of government; the individual's relation to the state; the ideals, functions, and problems of American political institutions; and selected contemporary issues and political events. Supporting materials can be used.
3. *The personal proficiency demonstration* requires the student to think about and organize a presentation about the requirements of adult living in our society in terms of personal fulfillment, social skills, and practical competencies; and to discuss his or her own strengths and weaknesses in everyday living skills (health, home economics, mechanics, etc.) and interpersonal relations.
4. *Knowledge of geography* should be demonstrated in a presentation that covers the basic principles and questions of the discipline; identification of basic landforms, places, and names; and the scientific and social significance of geographical information.
5. Evidence of the graduating senior's successful *completion of a physical challenge* must be presented to the ROPE committee.
6. A demonstration of *competency in English (written as well as spoken)* is provided in virtually all the portfolio and project requirements. These, and any additional evidence the graduating senior may wish to present to the committee, fulfill the requirements of the presentation in the English competency area.

The above is drawn from the 1984 student handbook, "Walden III's Rite of Passage Experience," by Thomas Feeney, a teacher at Walden III, an alternative public school in Racine, Wisconsin. Preliminary annotations are by Grant Wiggins. (Cushman 1990, p. 10)

This complex, multidimensional form of assessment has also been adapted to an urban setting by Central Park East Secondary School in New York City. Students there compile a portfolio that must contain the following elements:

1. Postgraduate Plan
2. Autobiography
3. School/Community Service and Internship: evidence of accomplishments
4. Ethics and Social Issues: project or presentation
5. Fine Arts and Aesthetics: exhibition
6. Mass Media: project
7. Practical Skills: evidence of mastery from world outside school
8. Geography: performance assessment
9. Second Language and/or Dual Language: competence demonstration
10. Science and Technology: test and performance demonstrations
11. Mathematics: state competency test and project
12. Literature: texts read and sample essays about literary works
13. History: state competency test or faculty-designed test and overview of areas studied and timeline, and historical research
14. Physical Challenge: demonstration or documentation of participation or proficiency in team or individual physical activities

SENIOR PROJECTS

The *senior project* is another form of assessment that is being put into place at high schools throughout the country. In general, the senior project is meant to be a "capstone" experience that provides an avenue both for demonstration and celebration of the student's knowledge and skill in an area of interest to the student. Senior projects vary from school to school, but most follow a similar structure and progression. Darling-Hammond and others (1995) describe the senior project at Hodgson Vocational Technical High School. Students follow a five-step process:

1. *Select an advisor and project committee members.* Students begin this process at the end of their junior year. Student and advisor work to identify a project committee that serves as both resource and judge. In addition to teachers, individuals from the community may serve on the committee if the students invite them.
2. *Select a topic.* Students are encouraged to challenge themselves and investigate topics of genuine interest to them. Some must begin by

examining carefully what their interests truly are. If students succeed in selecting a topic in which they have high interest, they will be more able to do the hard work and meet the demanding standards of the senior project.

3. *Research the topic and prepare the research paper, the product, and the oral presentation.* Students must use many skills to complete these three tasks. They develop their researching and writing skills and are expected to write and rewrite their research paper. It must be clear and logical and include all the structural features of a carefully constructed research paper. The students then actually produce something, a model that illustrates their research. They then prepare their oral presentation.
4. *Make a formal public presentation before the project committee.* The presentation is not less than ten minutes or more than thirty minutes. Students may then be questioned by the committee, a process that may go on an additional half-hour. Students find this aspect of the senior project the most daunting and anxiety-inducing. At the same time, some of the most powerful learning has resulted from this requirement.
5. *Receive a final evaluation from the project committee.* Each component of the senior project, research paper, product, and presentation receives a grade that meets a school requirement in shop and English. Committee members apply consistent, common criteria for scoring the public presentations: content (30 points), organization and plan of work (30 points), communication skills (30 points), and personal appearance (10 points). Each committee member scores the presentation on these criteria.

THE PROBLEMS AND CHALLENGES FACED BY NEW ASSESSMENTS

New forms of performance assessment are exciting in many ways and challenging in many others. Researchers and educators are learning how to use various assessment strategies effectively. In all cases, assessments are powerful tools that operate to affect a number of educational dimensions at once. Teaching methods, instruction, teacher training, even the school's schedule have to be reexamined when new assessment methods are put into place. Furthermore, not only must teachers master these new techniques, but students and their parents must come to understand them and accept them as valid replacements (or supplements) for traditional measures, such as standardized-achievement test scores and teacher-generated letter grades.

For example, portfolio assessment has shown great promise as a tool to enhance student engagement in learning and to extend teaching beyond rote tasks to more complex dimensions, such as problem-solving and indepth writing and research. When used exclusively as a tool to determine progress within a teacher's classroom, the portfolio has few problems. It functions at least as well as a traditional grade. But when it is used to judge students against common standards external to the classroom, it encounters a series of problems.

Herman and Winters (1994) outline these challenges while also suggesting solutions exist. They note that

> some of [the] technical issues can probably be most easily solved if portfolio tasks are closely specified and highly standardized. But, in seeking technical rigor, we need to be sure not to lose the appeal of the portfolio concept. (p. 54)

The research suggests students maintain the same relative performance on portfolios as on traditional standardized measures; girls do better than boys, and disadvantaged or minority students do worse than advantaged or white students (LeMahieu and others 1995, Hearne and Schuman 1992).

Yet, teachers report positive effects from portfolios. The requirements of the portfolios led Vermont teachers to devote more time to problem-solving, mathematical patterns and relationships, an increased emphasis on mathematical communication, and more small-group work (Koretz and others 1992).

Results are mixed when the first attempts at large-scale portfolio review are considered. Vermont had difficulty achieving acceptable levels of reliability among teachers' portfolio scores during the first year. This was due in part to the wide variance in the student work that was included in the portfolios and the limited training teachers received about how to score. However, in Pittsburgh, the ARTS PROPEL project in visual arts, music, and imaginative writing allowed wide discretion in what students contributed to the portfolio and was still able to achieve interrater agreement correlations from .60 to .70 and a generalizability estimate of interrater agreement in the .80 range when a piece was reviewed independently by two raters. Furthermore, in Vermont reliability increased in subsequent years, sometimes dramatically. For example, interrater reliability for eighth-grade math portfolios increased from .53 to .83 (Viadero, April 5, 1995).

Why was one portfolio assessment more reliable than another? While research is just beginning to accumulate on this question, early results suggest that

> consensus depends on clearly articulated criteria, effective training, and rubrics that reflect shared experience, common values, and a deep understanding of student performance. (Herman 1994, p. 51)

In survey research conducted by the Rand Corporation, teachers in Kentucky and Maryland, two of the states with the most comprehensive commitment to new assessment methods, responded that they believed some schools had found ways to improve test scores without improving student learning. Only 15 percent of teachers surveyed believed higher test scores were the result of increased student learning. At the same time, 81 percent of Maryland principals believed resistant teachers had changed their approaches as a result of the assessment. Teachers made other changes as well:

> In writing and math, the new tests seemed to be achieving the goals of the reformers who designed them. Teachers said they had shifted away from teaching "mechanics" such as grammar and spelling, for example, to emphasize communication, analysis, and other higher-order skills. (Viadero, April 17, 1996)

However, the goal of raising all students to high standards was apparently not being met. Most teachers indicated they had not increased their expectations for special-education and low-achieving students. At the same time, over 70 percent of Maryland teachers and 80 percent of Kentucky teachers believed the testing program was helpful for these groups of students. Researchers noted that the tests were still being implemented in both states and that educators were only now becoming completely familiar with them and with the implications for change that the assessments engender.

CALIFORNIA

California's experience with a dramatically different state assessment system, CLAS, demonstrates other difficulties new forms of assessment have encountered. By attempting to have students write and by collecting information on student attitudes as well as skills, the test aroused criticism on several sides. It ran into sampling problems that rendered the data largely useless for their primary purpose—determining school-level performance. Simultaneously, some of the questions it asked students about their attitudes raised the concerns of parents who felt the state was infringing on their privacy.

In the end, an assessment that had attempted to create a new measure of learning and new targets on which teachers and students could focus was abandoned after only one year, leaving California at the time without a state-level assessment program.

MARYLAND

Maryland has implemented statewide assessments linked to school improvement in its elementary schools in grades 3, 5, and 8. The initial board policy to develop the system was adopted in August 1989. This led to the creation of *The Comprehensive Plan for the Maryland School Performance Program* in February 1990. Local districts began in 1992 to follow prescribed procedures for school improvement based on performance assessment and other data.

The assessments cover material in reading, writing, language usage, mathematics, science, and social studies and are performance-based. Criterion-referenced tests emphasize higher order thinking skills, problem-solving, and integration of knowledge. Performance tasks are also used as a part of this program. The Maryland School Performance Assessment Program sets statewide standards for achievement that each school's improvement team is responsible to use to make decisions about the instruction and school programs needed to help students meet the achievement standards. Each school must develop a plan to address the areas in which standards have not been met.

The sixth annual *Maryland School Performance Report*, released December 12, 1995,

> shows that Maryland's schools are making steady and substantial progress toward meeting the state standards. The state improved in 21 of 31 report areas between 1994 and 1995. Students made gains in 16 of 18 performance assessment areas....
>
> Across all Maryland School Performance Assessment Program (MSPAP) areas, satisfactory scores increased from 31.7 percent in 1993, to 35.3 percent in 1994, to 39.7 percent in 1995. In 1993, 113 schools were approaching or meeting standards in grade 3 mathematics; in 1995 nearly 300 schools reached that status....
>
> ...In 1995, only 61 schools—7.7 percent—were far from standards. On the school system level, all but one school system improved in at least 10 of the 18 content area categories....(Rosenberger 1996, p. 9)

KENTUCKY

The Kentucky Education Reform Act (KERA) instituted widespread changes in assessment practices. Schools were required to assess students using a "primarily performance-based assessment program to ensure school accountability for student achievement" (Kentucky Department of Education 1990, p. 233). This resulted in a multistage development process that began with the creation of a transitional assessment system consisting of a writing portfolio, performance event, and transition test administered at grades 4, 8, and 12. The twelfth-grade portfolio, for example, contained the following:

1. Table of contents
2. Best piece, chosen in collaboration with the teacher
3. Letter to reviewer written by the student explaining why she/he selected the best piece and how the piece was developed
4. One short story, poem, play, or personal narrative
5. Two prose pieces from content areas other than English or Language Arts, the purpose of which will be to predict an outcome, defend a position, evaluate a situation, or solve a problem
6. A personal response to a cultural event, public exhibit, sports event, media presentation, or to a book, current issue, math problem, or scientific phenomenon (B. Steffy 1993, pp. 56-57)

In addition to state assessment, each district must develop its own "continuous assessment program to evaluate how students were progressing toward the state-assessed benchmark" (Steffy 1993). The transitional system served as the basis for the system that was subsequently put into place, which relied on a similar mix of portfolio, demonstrations, and criterion-referenced tests.

The Kentucky Institute for Educational Research conducted an evaluation of the assessment program to determine its implementation and use by teachers.

> The extent to which performance assessment is occurring in the classrooms of the teachers selected for this study varies considerably both within and across schools. Observers found a range of differences in terms of understanding what is required of a particular type of assessment and how it should be implemented. Understanding and utilization of specific innovation components varied from teacher to teacher. There is confusion about the meaning of terms used to describe different types of performance assessment. Terms such as "performance task," "portfolio task," and "culminating performance" are often used interchangeably....
>
> KIRIS [Kentucky Instructional Results Information System] is having a major impact on the use of performance assessment in the classrooms of teachers at the selected schools. However, the use of performance assessment for many teachers is primarily in preparation for KIRIS tests rather than as an integral part of their daily instruction.
>
> Multiple forms of assessment including oral and written open-ended questions, performance events, portfolio assignments, skills tests, and conferencing are used by seven of ten teachers surveyed. More than half

> used some type of open-ended questions within the scope of an instructional unit.
>
> Nine of ten teachers reported using oral and written, open-ended questions on a regular basis and eight of ten teachers reported using portfolio tasks within units of instruction.... ·
>
> Differences in the setting of standards for performance assessment were observed among elementary, middle, and high school levels. Elementary teachers display student work most frequently as a standard-setting mechanism. High school teachers are the most likely to provide students with standards in advance and to use scoring rubrics on assessments.
>
> High implementors of performance assessment use assessment to drive instruction, use technology and hands-on manipulatives more frequently, provide challenging and engaging assessments, and provide content that covers multiple Kentucky Learning Goals and Academic Expectations. These areas are the greatest predictors for implementation.
>
> High implementors of performance assessment use open-ended, written questions and portfolios [sic] tasks more frequently. However, types of assessments tend to vary independently of the other components that were measured and by themselves are not good predictors of effective implementation.
>
> New teachers report higher uses of performance assessment in instruction than more experienced teachers. For example, 95 percent of teachers with one to five years' experience report using performance events within units of study. The extent of use of performance events drops to 70 percent for teachers in the range of six to ten years and to 50 percent for teachers with more than ten years of teaching experience. (School of Education, University of Louisville 1995, pp. xii-xiii)

Kentucky's assessment system is designed primarily to establish school-level accountability for student learning, not as a high-stakes system for student promotion or graduation. However, schools have objected that the results of the assessment are not accurate reflections of what their students have learned, particularly those schools whose students have fared less well than would have been expected. Technical problems with sample size and other reliability issues have clouded the system's utility as a means to distribute funds to reward high-performing schools and to intervene in schools that are not progressing toward their improvement targets in a timely fashion.

OREGON

By contrast, Oregon's Certificates of Initial and Advanced Mastery (CIM, CAM) and its Proficiency-based Admission Standards System (PASS) are designed to make determinations about individual students.

These three performance-based systems plan to use a combination of assessment methods in three basic categories to award two certificates to students around ages sixteen and eighteen, and to determine readiness for college admission. Although the requirements for each are slightly different, they will overlap to a high degree. There are three primary dimensions for assessment.

1. *Criterion-Referenced Tests.* These will be developed by the Oregon Department of Education in consultation with the Oregon State System of Higher Education and will yield data in content areas primarily for the CIM and CAM and secondarily for college admission (PASS).

2. *Common Assessment Tasks.* Districts will have considerabe discretion selecting which task to use to meet CIM, CAM, and PASS requirements. For each Common Assessment Task, students respond to the same prompt statewide and are scored against the same standards. These tasks are complex in nature and can be interdisciplinary. They may involve writing a research paper, conducting an investigation, or solving a complex problem.

3. *Teacher Verifications.* Many areas of student performance will be verified by teachers, who are to apply common standards throughout the state to determine if student work samples demonstrate required levels of performance. Considerable work will be required to ensure teachers' judgments are consistent from school to school. Ongoing training combined with validation panels that rescore work from randomly selected schools each year will help preserve adequate reliability.

Assessment is facing a series of challenges. The most important one is how it will be used. The methods that yield the best information to students and teachers rarely serve the needs of policy-makers and vice-versa. As assessment becomes more of a high-stakes proposition for students, parents, and educators, all groups can expect to raise issues about the technical quality of the assessments or simply to mount political efforts to overturn them if these new assessments result in too many students failing them, are threatening to the way things are done, or show the school in a bad light.

A high standard backed up by an authentic assessment can be a driver for improved learning, but at first many students and schools are likely not to do well with the system. Scores will not be high enough, and pressure will be applied either to lower required scores or modify the assessments. It will always be easy to set standards, but far more difficult to sustain the effort needed over time to see that student-learning gains as demonstrated on authentic assessments continue until desired performance levels are reached.

RISING DEMAND FOR ACCOUNTABILITY

The preceding pages provide examples of both issues and techniques in assessment. The process of developing such assessments is complex, yet critical to the success of school restructuring. Without clearly defined standards and assessment methods, it will be difficult, if not impossible, to demonstrate accountability in restructured learning environments. Parents, policy-makers, and the public at large appear less likely to tolerate a system of public education that lacks adequate accountability procedures and measures.

In fact, public policy seems to be moving toward increasing accountability for public schools. This appears to be due at least in part to the continuing accretion from the local to the state level of the responsibility for financing local school districts as more courts find state educational financing schemes unconstitutional. Additional impetus for accountability comes from the expectation, held by a growing number of people, that governmental agencies and programs are responsible not just to provide services, but to achieve results, to make a difference, and to meet client needs if they are to justify their continued funding.

THE CHALLENGE OF CHANGING THE CENTRAL VARIABLES

Many restructuring schools launch some sort of project or change in school organization or structure and identify this as restructuring. Others take a broader view and develop a vision, mission, and key strategic directions. Missing from both approaches is the development of performance standards and appropriate assessment methods—what students will be able to do upon completion of an education and how such learning will be judged. As discussed earlier, performance standards can provide a framework within which appropriate assessment strategies can be selected or developed.

Once standards and assessment strategies are identified and agreed upon by a school faculty, the changes that need to be made in the structure of the school and the content and organization of the curriculum and instructional program become much clearer. This process of working from standards to program structure allows for a more rational process to be followed to determine which projects should be launched to restructure the school; it also establishes a framework within which all new ideas and proposals can be debated and analyzed by all faculty.

Such a conversation is not an easy one, particularly for faculty members who are not accustomed to discussing substantive issues related to standards, curriculum, instruction, and assessment. Ultimately, such issues are rooted in values. Members of the school community must ask themselves: What is worth knowing? How is it best taught and assessed? If faculties and communities can reach some agreement on what young people should know, and how they should be expected to demonstrate their ability to apply what they know, the work of restructuring moves from a strategic level to a tactical one in which the primary question becomes: How can the school best be organized to ensure that the desired standards are achieved by essentially all students?

Such an approach challenges the traditional isolation of teachers. It suggests that teachers will have to teach in ways that will meet certain agreed-upon standards. As schools currently exist, few mechanisms help or cause teachers to think in terms of how their work relates to what other teachers are doing, have done, or will do. Performance standards arrived at through dialogue and discussion will tend to drive instruction in a school and will require considerable communication, cooperation, and collaboration among faculty for students to succeed. These norms may not be embraced with enthusiasm by teachers accustomed to working in isolation.

Furthermore, these discussions are difficult because they may call into question the value of a particular area of the curriculum or method of teaching. In some cases the threat goes even further, with certain existing subject areas not being represented in the standards that are developed and approved. A process such as this is terribly difficult to conduct successfully in an environment such as a school (or school district) where there is a high premium on maintaining harmony, where many administrators pursue this goal over all others.

The development of standards that result in accompanying changes in curriculum, instruction, and assessment will be very challenging for districts to do on a voluntary basis when motivated only by the goal of professional improvement of practice. In most cases, standards will have already been developed at a state level and the school will be asked how to achieve them. In some states, schools will be given a broad framework of standards and asked or required to adapt them to their particular school. Processes of this nature are highly political in nature and require a political context conducive to change. Elements of such a context are considered in part 4.

The preceding four dimensions—standards, curriculum, instruction, and assessment—constitute the core of schooling. They are the areas that must be addressed sooner or later for substantial improvement or change in education to be achieved. They are also the areas most difficult to change. This is true in part because many of the changes described in these four chapters require teachers (and administrators) to examine many of their assumptions about learning and learners, about what constitutes valid educational experiences, and about how learning should be organized.

Change is also hindered by the lack of resources for staff development and release time that would give teachers the opportunity to engage in the type of thoughtful analysis and planning necessary to rethink teaching and learning, and to develop new curriculum materials, teaching skills, and assessment strategies. Lack of adequate vision and leadership by those in administrative positions can make change of this nature much more difficult, or impossible.

CHAPTER 13

LEARNING ENVIRONMENT

A multitude of projects and experiments seek to change the learning environment. I define the *learning environment* as the ways in which students are organized for instruction, including grouping patterns, grade levels, and other organizing strategies and instructional settings.

For example, many elementary schools are experimenting with multiage groupings of various types, are having groups of students stay with a teacher for more than one year, and are working to integrate students from pullout programs into the regular classroom. Secondary programs are experimenting with schools-within-schools, community-based education, and the elimination of tracking.

Why is it important to examine the structure of the learning environment? As noted earlier, most schools are essentially bureaucratic in structure. This aids in making schools more efficient but can hinder the personal interactions so critical to the learning process. Stockard and Mayberry (1992) summarize the research on effective educational environments and indicate the importance of both cognitive and affective dimensions of the learning environment:

> In effective learning environments, students and teachers have positive feelings about their work setting. High morale appears to bolster the self-confidence of both teachers and students and promote positive attitudes and expectations about teaching and learning abilities....
>
> That is, academic achievement is enhanced when the normative structure of the group integrates high academic expectations with learning processes that emphasize interdependence, cooperation, and an orderly learning environment characterized by warmth, concern, and respect of others. (pp. 34-35)

Many of the efforts to change the learning environment are attempts to achieve a better balance between these sometimes conflicting needs for order and warmth. The challenge is to create an environment in which all students feel valued and challenged simultaneously, where they enjoy being at school but also achieve academically. Stockard and Mayberry (1992) describe this as attempting to achieve a balance between the expressive, or socioemotional, dimensions of classrooms and schools, and the instrumental, or task-related, dimensions. The remainder of this chapter is devoted to a discussion of some of the strategies schools are employing in their attempt to establish (or reestablish) this balance.

MIXED-AGE OR NONGRADED GROUPING STRATEGIES

There is a great deal of experimentation occurring with mixed-age learning environments in elementary schools, particularly at the primary (grades K through 3) level. This approach, often confusingly referred to as "nongraded primary,"* is based on the premise that it is not useful to organize children into instructional units based on age when the key organizing concept should be the developmental interests, abilities, and readiness of the child. In such environments children are grouped and regrouped based on factors other than age. The curriculum is not merely a simpler version of that which will be offered in the coming grades, but is designed to offer experiences and activities that are inherently interesting to children at this particular developmental stage of their lives.

Multiage programs are not new. They have seen periods of popularity at different times during the past fifty years. In fact, the one-room schoolhouse may be thought of as the ultimate multiage program in some respects. In 1963, Goodlad and Anderson expounded the rationale for such programs in *The Nongraded Primary*. This book has since been revised (Goodlad and Anderson 1987), in part due to the interest that has been demonstrated in various places, including Kentucky and British Columbia, which mandated mixed-age, developmentally appropriate learning environments for primary grades, and Oregon, which mandated investigation and development of such models. Interest has also been evident throughout the decade in other states where schools or districts are establishing multiage classrooms and at professional conferences for elementary teachers, where presentations on the rationale, organization, and techniques of such programs are increasingly commonplace.

What exactly are the characteristics of such programs? Pavan (1992), using the term *nongraded*, provides a definition of such a school:

> A nongraded school does not use grade-level designations for students or classes. Progress is reported in terms of tasks completed and the manner of learning, not by grades or rating systems. A team of teachers generally works with a team of students who are regrouped frequently according to

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* The confusion results from the term *nongraded* being interpreted to mean students do not receive grades or report cards.

> the particular task or activity and student needs or interests. Many times these are multiage heterogeneous groups pursuing complex problem-solving activities in interdisciplinary thematic units.
>
> Students are active participants in their learning and in the collection of documentation to be used for assessment and evaluation. The continuous progress of pupils is reflected in students' growth of knowledge, skills, and understanding, not movement through a predetermined sequence of curriculum levels. (p. 22)

Studies that compare graded and nongraded schools "provide a consistent pattern favoring nongradedness," Pavan reports. Students in nongraded groups performed better than (58 percent) or as well as (33 percent) students in graded groups on measures of academic achievement. Such performance is "rather remarkable," since nongraded schools do not necessarily teach the textbook in the manner in which traditional classes do. Because nongraded schools adjust learning tasks based on individual differences, students may not be exposed to the same material in the same sequence as students in graded classrooms. "Yet nongraded students performed as well or better than graded students on achievement tests emphasizing mastery of content that is generally not the primary focus of the nongraded school" (Pavan 1992).

At the same time, students in such environments fared better on assessments of mental health. They had more positive attitudes and scored higher on self-esteem inventories. Studies that tracked students over time found that those who spent their entire elementary careers in nongraded classrooms demonstrated superior academic achievement and felt more positive or the same as students in age-graded classes. One study found that nongraded students received fewer discipline referrals when they entered junior high school. Nongraded programs were found to benefit boys, African-Americans, students from low socioeconomic backgrounds, and underachievers.

Guiterrez and Slavin (1992) present findings that are generally consistent with those of Pavan. They found the most positive achievement effects to occur in plans that were simpler forms of multiage grouping evaluated during the 1960s. These programs resembled the Joplin Plan, in which cross-age groups are used primarily for reading. Positive effect sizes were also noted for programs that grouped across grade level for multiple subjects. Slavin cautions that multiage grouping should not be confused with individualized instruction, for which little evidence of enhanced achievement can be found. Based on Guiterrez and Slavin's study (1992) of the effect size (proportion of a standard deviation by which experimental groups exceed control groups) of multiage learning environments, Slavin concludes:

> The effectiveness of nongraded elementary programs depends in large part on the features of the program, especially the degree to which nongrading is used as a grouping method rather than as a framework for individualized instruction. (Slavin 1992, p. 25)

Kentucky has gone the farthest in adopting multiage grouping. The Kentucky Education Reform Act required all Kentucky primary programs to include multiage grouping. The progress implementing this mandate has been uneven, and some Kentucky educators are asking their legislators to revisit the requirement. Nevertheless, a tremendous amount of training and development has already taken place, enabling Kentucky teachers to group students more flexibly than by age cohorts alone. Evaluation data indicate that over half the teachers were implementing full multiage classrooms by mid-1995 (Institute on Education Reform, University of Kentucky, 1995).

British Columbia spent several years developing extensive materials for multiage classes and training teachers in their use. The province has subsequently moved away from mandating multiage classrooms for all students to allow more choice at individual schools.

Multiage forms of organization appear capable of creating an environment that engages students positively and allows them to retain positive attitudes about themselves and schooling while developing the basic skills necessary to succeed in school. Multiage approaches challenge the factory model of organization, where children are labeled based on an arbitrary characteristic (age) to allow for the orderly assignment and flow of students through the institution. Age-based grouping provides many advantages for those who must organize schooling; it may offer relatively fewer advantages for those who are being educated within that structure.

SCHOOLS WITHIN SCHOOLS

There is adequate evidence to suggest that smaller schools lead to greater student success along a number of dimensions. Stockard and Mayberry (1992) offer this assessment of the research on school size and student attitudes:

> Studies of elementary students suggest that small schools provide a more humanistic learning experience....
>
> Several studies suggest that students in small high schools are involved in a greater number and variety of activities, assume a greater number of positions of responsibility, are less alienated, and have a greater "sense of belonging" to the group than students in larger schools (Huling 1980; Barker and Gump 1964; Willems 1967; Baird 1969; Peshkin 1978; Turner and Thrasher 1970; Morgan and Alwin 1980; Wicker 1968, 1969; Downey

> 1978). These results occur in both urban and rural areas and particularly with students from lower socioeconomic backgrounds (Holland and Andre 1987). Because of their greater involvement, those in small schools report feeling needed and challenged, that they have an important job (Willems 1967; Wicker 1968). Many studies have linked these feelings of involvement with a lower probability of dropping out of school. Students who feel more identified with their schools are much more likely to remain in school until graduation (Finn 1989). (p. 47)

Lee and Smith (1994) affirm this finding. They found that students in high schools that enrolled in the range of 600 to 900 students achieved better than did their counterparts in larger or smaller schools (Viadero and Drummond, April 24, 1996).

Large high schools and middle schools are experimenting with schools-within-schools to capture the advantages of both large and small schools in one educational setting, to allow students to connect with school, and to expand choice while accommodating the diverse interests and goals present in most communities. Teachers with a unique vision of education have an opportunity to attempt to translate that vision into practice. Such settings create opportunities for affiliation and community-building. They can offer parents a way to have some choice regarding what type of program their child attends within the public schools.

Roderick found that students whose grades fell sharply during their freshman year were more likely to drop out of school. She concluded that "a lot of students simply find it hard to make a good transition from the lower grades, where they're given personal attention, to the large bureaucratic institutions many of our high schools have become" (cited in Hayes 1992).

Oxley asserts that large schools, particularly large high schools, are difficult to defend on educational grounds. She cites research that indicates large school size adversely affects attendance, school climate, and student involvement in school activities. Large size also contributes to higher dropout rates, vandalism, and violence (Goodlad 1984, Garbarino 1978, Lindsay 1982, Pittman and Haughwout 1987).

Schools-within-schools may be one means to reshape large institutions to put a personal face on them. However, these new structures carry potential problems with them as well. They must be ready to address equity issues to ensure that admission is open and equitable, and that their student populations are representative of the school as a whole and the community broadly. One temptation is to create small units where everyone essentially thinks alike. Such arrangements can easily contribute to an "us versus them" mentality.

Sooner or later most schools-within-schools will face the problem of institutional legitimacy, particularly in environments of declining resources. In other words, which school is the "legitimate" school: the school-within-a-school, or the larger school? The experiences of such programs in the early seventies indicate that such programs are very sensitive to declines in resources in the district. Their need for very specific types of staff members comes into conflict with the district's needs to assign or reassign teachers. As cutbacks occur, the contract may dictate that teachers who do not necessarily agree with the basic premises of the school-within-a-school will be assigned to it anyway because of seniority. Pressure to revert to the "legitimate" model of education, as embodied in the remaining traditional structure, will be strong.

If schools-within-schools are attempted, several issues can affect their success. If a school-within-a-school exists in a larger educational structure that continues to be labeled as the "legitimate" or "real" school, the larger school may eventually overwhelm the smaller, more vulnerable school-within-a-school. This danger argues for a complete transition to a series of programs within one building. The new programs should be roughly equal in size and all be distinctly different from a "traditional" program, with no single program able to claim primary institutional legitimacy. One way to accomplish this transition has been demonstrated by District 4 in New York City. The district disbanded an existing school and turned over the site to a series of programs from different grade levels that had little in common other than the shared site.

Another alternative is to officially designate the school-within-a-school as the research and development center for the building or district. Staff within the larger school site (or district at large) agree that new practices developed and tested at the school-within-a-school that prove to be successful will eventually be implemented in the larger school (or the district). Such a caveat is likely to increase staff interest in the goings-on in the school-within-a-school significantly, as well as to establish a clearer relationship between the school-within-a-school and the rest of the educational environment.

The designation of a school-within-a-school as an R & D center has another benefit. It creates a place where teachers can observe and be trained in new teaching techniques before implementing them in their "regular" classrooms. The concentration of resources, such as new technologies or adequate staff development funds, in such a center can allow educators to develop and experiment with new techniques in a cost-effective manner. Such a school also shows parents that new programs are being carefully developed and tested under controlled conditions.

Since enrollment in such a school would be voluntary, it is likely that those involved with the schools would be open to new approaches. The smaller size of the R&D center would allow staff to develop a close working relationship with parents and to solicit parents' feelings about new programs and techniques that may be piloted at the center. This involvement would also provide an indication of the kinds of issues that may be raised by those in the traditional program when the new techniques are implemented there.

One of the dangers of schools-within-schools is that they often become dumping grounds for the unwanted, the difficult-to-teach, or the "at-risk" student. While these students certainly need educational environments in which their needs are addressed, there is little to suggest that concentrating these students in one location is preferable to allowing them to interact with a wider range of young people.

At the other end of the spectrum are schools-within-schools that become elite programs. Experience suggests that when one such program gains a reputation as being "better" than the rest of the school, there is pressure to disband it because of the subtle (or not so subtle) competition for students and the social ranking that begins to occur. The tendency is for some to insist that norms of mediocrity be enforced on all aspects of the school equally and that the "elite" program be disbanded. A better result would be that the program serve as a catalyst for the rest of the school to improve. That will require a remaking of the culture of the school and the incorporation of new norms regarding professional relations. As has been noted frequently throughout this book, the difficulty of such changes should not be underestimated.

Early findings from schools in the Coalition of Essential Schools suggest that schools-within-schools face serious problems moving beyond the small group of pioneers that begin them. Particularly large schools (as in the case of many urban high schools) have tried a different approach where the entire school is broken up into separate schools, each with a different identity and focus. Often these are magnet programs, designed to appeal to students from outside the school's attendance area as well as to those who attend the large high school. These programs then co-exist as functional equals with no one program having a claim to legitimacy or resources over the others. This is one way to decentralize a large campus. However, the programs that live on the campus often have little interaction with one another, which can lead to "turf" issues and may limit student opportunities.

CREATING LEARNING COMMUNITIES

The premise behind all schemes for breaking down large, complex organizations into smaller subunits is that such structures will allow more opportunities for human interaction and affiliation to occur. In other words, the potential that a strong sense of community will develop is enhanced. This sense of community appears to be an important dimension of student learning, particularly for at-risk students.

The need to create a strong and healthy school community is greatest in situations where family life may not be as supportive of student development and where the youth culture is strong. Steinberg, Brown, and Dornbusch (1996) studied a mix of high schools in urban and rural settings across economic lines and found that "student disengagement was pervasive. Roughly 40 percent of the students said they were 'just going through the motions' in school" (Viadero, June 5, 1996). The authors conclude that by the high school years students' peer group is more influential than their parents and that students hide their abilities in order to avoid conflicting with group norms that deride achievement. Students spend twenty to twenty-five hours a week with friends.

Schools where teachers do not get to know students well inadvertently contribute to the power of youth culture by establishing the peer group, which is relatively stable over time, as the primary mode of social organization for the school. The peer group, moving relatively intact from grade to grade, is a powerful counterforce to teachers, who must in essence negotiate with this social structure each fall as school resumes.

Even in schools with high transient rates, students quickly form into peer groups that are narrowly bounded by age. This deprives them of role models or of a wider range of examples of behaviors they may wish to emulate. Pullout, remedial, and special-education programs, however well intentioned, can contribute to creating peer groups with anti-academic values.

Wynne and Walberg (1994) recommend that American educators give greater emphasis to the principle of "group persistence," by creating more stable, long-term groupings of adults and students. Such groupings enhance affiliation and bonds among members and create a greater sense of belonging, which is particularly important for students who may not have a strong family structure that meets such needs. The authors advocate that

- Schools should try to keep discrete groups of students and teachers together over long periods of time. The size of the groups is not as important as their continuity. Inevitably, various school priorities will seem to dictate that such groupings be fractured. In the face of such pressures, a high value should be allocated to the goals of group and

> faculty continuity. We are dealing with human beings, not automobile parts.
>
> - With appropriate planning, persisting groups can be formed even in large schools. A variety of organizational options—e.g., divisions, homerooms, houses, or subschools—may serve to foster small-group life. (pp. 529-30)

Burke (1996) states that "multi-year teacher/student relationships are still uncommon in U.S. schools. But research findings and the enthusiasm of participants in multi-year relationships suggest that the arrangement merits serious discussion and widespread piloting" (p. 361). He cites the results of a study of middle schools conducted by George and Oldaker (1985):

> Approximately 70% of [the teachers] reported that teaching the same students for three years allowed them to use more positive approaches to classroom management. Ninety-two percent of them said that they knew more about their students, and 69% described their students as more willing to participate voluntarily in class. Eighty-five percent of the teachers reported that their students were better able to see themselves as important members of a group, to feel pride in that group, and to feel pride in the school as a whole. Eighty-four percent of the teachers reported more positive relationships with parents, and 75% reported increased empathy with colleagues. The reactions of students in this study were favorable as well, and they grew more positive with each successive grade level. Parents also responded positively; indeed, when allowed to request teachers for their children, 99% of parents requested the same teacher to whom their child had been assigned during the previous year. (pp. 360-61)

Oxley (1994) describes the Köln-Holweide school in Cologne, Germany, as an example of a school in which the conditions of the learning environment have been altered to bring about new relationships between students and teachers and to create a learning community. Group membership is a key concept in this school. The school exemplifies "an approach to small-unit organization that is geared to meeting students' diverse academic needs in 'regular' classrooms." It "incorporate(s) structural features of small-unit design that have come to be associated with greater teacher knowledge of students, a sense of community among students, and higher rates of attendance and academic achievement." The Holweide school "also employ(s) the kinds of alternative instructional methods that need to accompany structural reorganization." (p. 522)

The Holweide School is composed of schools-within-schools of approximately ninety students each. The staff base their organizational model on personalizing education for the fifth- through tenth-grade students in the school. Their two key goals are to diminish anonymity and to allow students of varying backgrounds to work together. The groups of ninety students and six teachers stay together for six years. The groups of ninety are further broken down until ultimately a student ends up as a member of a "table group" comprising five or six students. This group remains stable for a year or more.

Students are trained in the best methods of working together as a team. Twice a year groups consult with their tutors to assess their progress and their personal contributions. These meetings often take place at the tutor's home, over breakfast. The table groups develop common offcampus experiences and projects, which may involve them in social issues in the neighborhoods surrounding the school. Ratzki (1989/1990) describes the learning environment at Holweide School:

> We assign students to table-groups of five or six members integrated by sex, ability, and ethnic origin. Within these "social unit" groups, the children tutor and encourage each other. The difference between our groups and cooperative learning groups is that our children stay in these same groups for every subject, normally for at least a year. The aim is to promote stable groups in which the members learn to work together despite their individual differences. To achieve good group results, each member is responsible not only for his or her own work but also for that of the other members. If the work of one child in the group is unsatisfactory or his or her behavior a problem, then we try to discuss the issue with the individual child as well as the group....
>
> Each table-group meets once a week to discuss any problems or to suggest improvements in their every day working situations.
>
> During lessons, except for free learning periods, the group practices and works things out *together*. Students who are more able are expected to help the other members in their group. Since the teacher's time is limited, this *helper system* is of great benefit. (p. 48, emphasis in original)

Differences among students are recognized through individual learning activities, such as techniques in learning how to learn:

> Each school week begins with a discussion circle. For this event, the students move their tables aside, and those who wish to can tell about something special or interesting that happened to them over the weekend. After these remarks, the tutors announce any special events in the coming week. Next, the tutors present the weekly plan, which structures each student's work for the upcoming days. They also write the individual obligatory tasks for their subjects on the board, which the students copy into their plan books. Each student then checks his or her plan for the previous week and copies any unfinished exercise into the new plan. As teachers for other subjects come into the classroom, the plans are added to....
>
> The circular discussion group format is also used for certain lessons. For example, during *tutorial lessons*, students discuss any problems with

> the tutors and how these can be solved. The students themselves determine the agenda for these lessons; the teacher plays a passive role. Each person in the discussion group who has just spoken in turn chooses the next speaker, irrespective of whether students or teachers have expressed their wish to voice an opinion. Coming from traditional schools, where teachers have an almost absolute right to speak whenever they wish, many teachers find that this format requires some getting used to. (Ratzki 1989/90, pp. 49-50, emphasis in original)

Teachers do not play a passive role in constructing the learning environment. They must make many decisions and take responsibility for creating the structures and content that allow students to engage in learning successfully:

> Teachers in Holweide have a great deal of autonomy. Between them, they teach all the subjects and are responsible for the education of three groups of 28 to 30 students. They form their own teams of 6 to 8 members; devise schedules for the coming year; choose who will teach which subjects in which classes; decide how the curriculum will be taught (in a single period or longer block of time, for example); cover for absent colleagues; and organize lunchtime activities, parents involvement, field trips, and many other concerns. They also decide among themselves which two people will work together as *class tutors* (home class, or home room, teachers) in a given class. (Ratzki 1989/90, p. 48, emphasis in original)

A number of American educators have journeyed to Germany to visit this program. Some have returned to emulate or adapt it for students in the United States. It appears to have been an influence on the thinking of a number of restructuring projects taking place around the nation.

Other descriptions of organizational structures designed to increase student affiliation and construction of learning experiences contain similar elements. Nickle and others (1990), in their description of a school-within-a-school, make reference to increased sense of community and affiliation as program outcomes:

> Another aspect of the program that has proved successful is "personalization".... Because the four [teacher] coaches are responsible for a total of only 80 students, the students get to know us and one another better than would be the case in a regular school. An unexpected rapport has developed within the [School-Within-A-School] SWS....
>
> A final beneficial aspect of the structure of the SWS is that students have developed a sense of "ownership" of the program. Those who interfere with learning are prodded into remembering why they are in school. The students usually reprimand and cajole their peers kindly, but such pressure is far more effective than an admonition from the instructor. Students also help one another freely and easily. As one student put it, "We

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> can better explain things to one another because we speak the same language, and we aren't embarrassed to ask one another questions about things we don't understand." (p. 150)

Lewis (1991) describes how one middle school faculty moved to a school-within-a-school structure that would enable its members to create different blocks of time within the school for different subgroups of students. The structure would facilitate teacher planning as well. The goal was to enhance the quantity of content teachers were able to teach:

> Discussions on high content piqued the Frick teachers' interest in interdisciplinary teaching. This led to a decision to go for teaming and to create "castles," in which groups of students stay together all day with a team of core teachers. By dividing the school into castles, teachers obtained common planning time, flexibility to schedule block periods, and closer relationships with students.... Organizing the teams required a massive moving day as teachers regrouped from subject-matter departments to castles. "That ruffled a few feathers," says Donna Blochwitz, perhaps Frick's most enthusiastic supporter of teams....
>
> June Jackson, principal at Frick when the castles were formed, found the process of organizing and starting the teams difficult for teachers at first. "It takes time and training for people to learn to work together," she explains. "Some relish an opportunity to change; for others, it is quite painful, even though they are stagnating." (pp. 50-51)

Descriptions of programs such as these suggest that viable learning communities can be created within larger organizational structures, if careful thought is given regarding their relationship to the larger structure. Such environments can do more than simply retain students in school. They can be places where enhanced social affiliation and greater learning occurs.

COMMUNITY-BASED LEARNING

Another way the learning environment is being redefined is by moving more instruction outside classroom walls. One strategy being considered by several states and school districts is the community-service requirement, in which all students spend some time outside school working in volunteer positions to improve the community. Such programs help students develop an appreciation of their roles in a democratic society and of their obligations to others through the concept of a social contract.

It is interesting that these programs may have more support within the business and social-services communities than among educators and parents of college-bound students, some of whom are cautious about the idea of making such service mandatory for all students (Lawton 1991).

Legal challenges have been mounted in states that have required community service, but these have not been sustained to date.

Conrad and Hedin (1991) conclude that school-based community service can have a positive impact on both the academic and social/psychological development of students. Peer tutoring shows evidence of increasing reading and math achievement for both tutor and tutee (Hedin 1987). Conrad and Hedin (1982) found enhanced problem-solving ability. Students who participate in community-service programs tend to exhibit enhanced social and personal responsibility, more favorable attitudes toward adults and toward community agencies and the people who work in such agencies (Conrad and Hedin 1982), more positive attitudes toward others, a greater sense of efficacy, and higher self-esteem than do students who do not participate in such a program (Luchs 1981). Participating students also show fewer signs of alienation and isolation and have fewer disciplinary problems (Calabrese and Schumer 1986).

Service learning, when it is mandatory or at least organized and sanctioned by the school, raises the question "In the service of what?" Kahne and Westheimer (1996) make it clear that service learning is inherently political. Students will reach certain conclusions based on the experiences they have. In some cases, they may come to believe that individual action is the cure for social ills. In other programs of service learning, they may go beyond their individual experiences to consider the causes of the need for service. They may scrutinize the system as well as serve the individual.

These two perspectives on service are fundamentally different. The first approach emphasizes the "charity" of giving one's time and energy to the less fortunate or needy. The second approach quickly becomes focused on issues of social change. The service experience is a springboard to questioning the status quo and, perhaps, to eventual political activity. The orientation is toward change, not charity.

> Efforts to integrate service learning activities into the curriculum have great potential and deserve the support they are now receiving. To date, however, little attention has been given to sorting out the goals and motivations that underlie the spectrum of service learning projects emerging in schools throughout the country. Is it beneficial to point out such differences and risk creating some opposition to service learning? We think so. Clarifying different goals provides educators with an opportunity to consider systematically a range of possible priorities (including some they might otherwise not consider) and the relation of these to their practice. (Kahne and Westheimer 1996, p. 598)

A different strategy is to move learning beyond the classroom and into the community, utilizing the community as the curriculum. Examples of this approach that were piloted in the late sixties and early seventies include the Parkway Program in the Philadelphia School District and Other Ways in the Berkeley School District.

Gardner (1991) describes a type of educational environment he believes is based on how young children approach thinking and learning in the absence of formal schooling. In constructing such an environment, he strives to apply what is known about how the human mind develops:

> Imagine an educational environment in which youngsters at the age of 7 or 8, in addition to—or perhaps instead of—attending a formal school, have the opportunity to enroll in a children's museum, a science museum, or some kind of discovery center or exploratorium. As part of this educational scene, adults are present who actually practice the disciplines or crafts represented by the various exhibitions. Computer programmers are working in the technology center, zookeepers and zoologists are tending the animals, workers from a bicycle factory assemble bicycles in front of the children's eyes, and a Japanese mother prepares a meal and carries out a tea ceremony in the Japanese house. Even the designers and mounters of the exhibitions ply their trade directly in front of the observing students.
>
> During the course of their schooling, youngsters enter into separate apprenticeships with a number of these adults. Each apprentice group consists of students of different ages and varying degrees of expertise in the domain or discipline. As part of the apprenticeship, the child is drawn into the uses of various literacies—numerical and computer languages when enrolled with the computer programmer, the Japanese language in interacting with the Japanese family, the reading of manuals with the bicycle workers, the preparation of wall labels with the designers of the exhibition. The student's apprenticeships deliberately encompass a range of pursuits, including artistic activities, activities requiring exercise and dexterity, and activities of a more scholarly bent. In the aggregate, these activities incorporate the basic literacies required in the culture—reading and writing in the dominant language or languages, mathematical and computational operations, and skill in the notations drawn on in the various vocational or avocational pursuits.
>
> Most of the learning and most of the assessment are done cooperatively; that is, students work together on projects that typically require a team of people having different degrees of and complementary kinds of skills. Thus, the team assembling the bicycle might consist of half a dozen youngsters, whose tasks range from locating and fitting together parts to inspecting the newly assembled systems to revising a manual or preparing advertising copy. The assessment of learning also assumes a variety of forms, ranging from the student's monitoring her own learning by keeping a journal to the "test of the street"—does the bicycle actually operate satisfactorily, and does it find any buyers? Because the older people on the team, or "coaches," are skilled professionals who see themselves as train-

> ing future members of their trade, the reasons for activities are clear, the standards are high, and satisfaction flows from a job well done. And because the students are enrolled from the first in a meaningful and challenging activity, they come to feel a genuine stake in the outcomes of their (and their peers') efforts. (p. 40)

The Lowell Public Schools, in Massachusetts, established a variation on this type of learning environment by creating a school structured as a microsociety. Based on the book *The Micro-Society School: A Real World in Miniature* (Richmond 1974), the school opened in the downtown business district in 1981. The goal was to engage students, teachers, parents, and community members in the development of a miniature society that would serve as a school:

> The effort began with the introduction of money, markets, and property into the school. The students, advised by their teachers, used these ingredients to create a microeconomy. The microeconomy, in turn, has led to the creation of numerous organizations and jobs in them. Students fill these positions. Some of the work opportunities have arisen in the business sector; others have developed in government agencies, in the miniature society's fledgling legal system, and in a variety of cultural organizations. As these institutions evolve, so do markets for land, labor, and capital. Interacting with these markets has become a dynamic part of each student's school experience.
>
> Beginning in kindergarten, children attending the microsociety school play with the fundamental building blocks of modern society. As they grow and mature, their miniature society matures with them. Apart from gaining insight into adult experience and adult society, there is no prescribed ideological path that the students must follow. With the assistance of parents and teachers, they fashion their own.
>
> The Lowell microsociety school is a living experiment in applied moral development. Children and adults constantly face moral dilemmas that they must solve as they strive to build a "good" society. Do you want a microsociety with the extremes of poverty and wealth? Do you want a state based on law or one based on fear and violence? Should the microsociety's government assist or ignore children who may not be succeeding? Do you want a democracy or totalitarian state? What liberties should students have? And what responsibilities should they shoulder? What kinds of activities should be taxed? When does one put the community's welfare ahead of the rights of the individual? What civil rights should children enjoy in their microsociety? When has justice been done? Children attending the City Magnet School face these dilemmas under the guidance of parents and teachers, many of whom may be struggling with similar issues in the real world.
>
> The City Magnet School provides students with a strong, traditional program in the basic skills.... [T]he students learn basic skills as they legislate, adopt budgets, pass tax measures, administer justice, govern, or

> simply communicate with one another regarding commercial and legal matters. They read, write, and use mathematics with purpose. In other words, the basic skills have utility. In the tradition of John Dewey *doing* reinforces *learning*. (Richmond 1989, p. 233, emphasis in original)

The preceding examples indicate that it is possible to think of schooling and learning occurring in a variety of settings and structures other than the factory-derived models based on the notions of economies of scale, centralization, and specialization that originate in scientific management. Such alternative settings offer the potential for education to focus on new and varied learner activities designed to meet challenging standards, rather than be limited to incremental improvement of current classroom-based models.

ALTERNATIVES TO TRACKING

Another fundamental change in the structure of the learning environment involves rethinking how students are grouped for instruction based on characteristics such as ability or achievement, rather than age. The one grouping strategy that is coming under the closest scrutiny is tracking, the practice of grouping students based on some measure of ability.

Tracking tailors the curriculum and instruction to each group based on assumptions about what students in each track are capable of learning. Students are retained in such groups over long periods and for a variety of subjects, sometimes throughout the school day, and from year to year. Tracking is a widespread phenomenon in American schools. Brewer, Rees, and Argys (1995) cite data from the 1988 National Educational Longitudinal Study that indicate over 85 percent of eighth graders are in tracked mathematics classes; nearly the same number in English classes; and closer to 90 percent in science.

Marsh and Raywid (1994) summarize Dentzer and Wheelock (1990) and Oakes (1985) to identify eight drawbacks common to tracking:

1. The best teachers are often assigned the ablest students, and the least-experienced—or least-favored—teachers are assigned the weakest and most challenging students.
2. There are differences in the content presented to the different groups, with less—and lesser—substance presented to low-ability students.
3. There are differences in the quality of instruction delivered to the different groups, with higher order thinking reserved largely for high-ability classes.
4. Teachers of students assigned to low-ability classes expect and demand little of them.

> 5. Students excluded from high-ability classes encounter lower motivation among their peers and develop less motivation themselves; thus they achieve less.
> 6. Students in low-ability classes include such disproportionate numbers of minority youngsters that tracking often functions as a form of resegregation.
> 7. Students in average and low-ability classes are restricted in their subsequent educational and career opportunities.
> 8. Compounding the above inequities, there are many cases in which youngsters have been erroneously assigned to lower track classrooms (often on the basis of standardized test scores). (p. 315)

The research on ability grouping has not always used the most sophisticated methods, such as randomized experimental designs. Nor has it necessarily taken into account the interaction among the range of variables that have an impact on student learning. Nevertheless, the findings across studies appear to be fairly consistent. Stockard and Mayberry (1992) reached the following conclusions regarding those findings:

> A large number of studies from a wide range of years suggest that, when students are in an environment with other high-achieving students, their own achievement tends to increase. In contrast, ability grouping appears to be detrimental for low-ability students. In other words, although ability grouping may sometimes benefit high-achieving students, a good deal of research indicates that it impedes the progress of students in lower groups (see Bridge et al. 1979; Kulik and Kulik 1982; Esposito 1973; Begle 1975; Brophy and Good 1986; Hallinan 1987, 1990; Sorensen and Hallinan 1986). In addition, ability grouping can affect status differences in a classroom with those in lower groups held in lower esteem (Hallinan 1984). Thus ability grouping can actually lead to larger differences between the high and low ends of the achievement and social distribution within a school or classroom.
>
> In general different types of grouping systems may have different effects on learning outcomes. For instance, some studies suggest that various types of ability groupings can sometimes benefit students in mathematics classes (Slavin and Karweit 1985; Dewar 1964; Smith 1960). Other work suggests that the Joplin plan, which calls for cross-grade grouping of students in reading and whole-class instruction (Moorhouse 1964; Kierstad 1963; Skapski 1960), can enhance achievement (Slavin 1987a, b; 1990b). (Stockard and Mayberry 1992, p. 11)

Brewer and others (1995) reached a different conclusion, at least in regard to student performance on standardized-achievement tests in mathematics. They concluded from their statistical analysis of homogeneous and heterogeneous classes that

> detracking would create winners *and* losers. Although students in lower tracks would realize achievement gains by being placed in a heterogeneous class, this gain would be at the expense of students placed in higher-level tracks. Our estimates imply that detracking all students currently enrolled in homogeneous classes would produce a net 1.7% drop in average mathematics test scores. (p. 214)

The feelings run strong for and against tracking and ability grouping, both among educators and researchers, who often criticize the methodologies of the research on the topic. At the same time there appear to be areas of agreement among researchers on some points:

> Participants in these debates tend to agree that ability grouping does not enhance achievement for the majority of children. In addition, they tend to agree that grouping arrangements that enhance achievement appear to alter the allocation of both instructional and learning time and instructional activities (see Slavin 1987b, 1990a, 1990b; Hallinan 1990; Provus 1960; Morris 1969). In other words,...differential effects in ability-grouped classes appear primarily because the instructional process is altered (see Barr, Dreeben, and Wiratchai 1983; Gamoran 1986; Hallinan 1990). (Stockard and Mayberry 1992, p. 12)

Tracking is usually instituted to help teachers deal with instructional issues related to the range of achievement present within a group of students. However, it has unintended effects on the self-concepts of both high and low-achieving students:

> School officials have assumed that, by preventing extensive contact of lower-ability students with their higher-ability peers, the self-esteem and self-concepts of lower-ability students are protected. In fact, exactly the opposite result seems to occur. Instead of feeling more comfortable about themselves, students in lower tracks tend to develop lower self-esteem, lower aspirations, and more negative attitudes toward school (Oakes 1985, 1987).
>
> It is also important to note that the result of higher track placement is not uniformly good. It may enhance achievement but not necessarily increase aspirations or self-evaluations. Students in higher tracks tend to have peers who perform well, thus enhancing group norms regarding performance.... [A] higher-ability context can lead individuals to give more negative evaluations of their own ability than they would in other contexts. (Stockard and Mayberry 1992, p. 14)

Rather than being primarily a tool to enable teachers to deal with the diverse achievement levels present in a classroom, tracking may, in fact, function to reinforce and define social relationships:

> Ideally, track placement would only reflect a student's academic achievement, ability, and motivation. In reality, most studies conclude that students' track placements are related to both their prior academic achievement and their social class background (Sorensen 1987) ....

> Many scholars suggest that tracking in secondary schools and ability grouping, its counterpart in elementary schools, function as the mediating variable between students' socioeconomic background and their educational achievement, occupational aspirations, and perceptions of themselves and their school.... These studies suggest that tracking reproduces class status by sorting students from different socioeconomic backgrounds into different curricula and providing them with unequal learning environments...[see] Oakes 1985; Schaefer and Olexa 1971; Alexander and McDill 1976; Barr, Dreeben, and Wiratchai 1983; Dreeben and Gamoran 1986; Garet and DeLany 1988; Sorensen 1987).
>
> In general, these studies suggest that students from lower socioeconomic backgrounds receive educational experiences that offer them limited access to high-status knowledge and normative climates that are not conducive to achievement. In contrast, students from higher socioeconomic backgrounds are much more likely to enroll in challenging curricular programs and college preparatory tracks that provide the type of knowledge and normative standards that are essential for higher levels of education and entrance into high-status occupations. (Stockard and Mayberry 1992, pp. 14-15)

Acknowledging that tracking is deeply rooted in the culture of many schools, Oakes and Lipton (1992) suggest a critical examination of basic assumptions about students and learning will be required before a movement away from tracking can begin to take hold. They describe schools that have abandoned tracking successfully and have established a culture of "detracking." Such schools recognize that the norms that support tracking are powerful and must be acknowledged as alternatives are developed; that changes in tracking must become part of a comprehensive set of changes in school practice; that the process of removing tracking is politically sensitive, is idiosyncratic to each school site, and requires broad-scale staff involvement; that it requires changes in adult working relationships and roles; and that certain teachers emerge as the risk-takers whose persistence over the long haul helps institutionalize alternative practices.

UNTRACKING SCHOOLS

Wheelock (1992) describes the work of the Massachusetts Advocacy Center, which, since 1990, has worked to identify untracked middle schools and to document their success in promoting both equity and excellence for all students. Researchers identified some 250 schools engaged in efforts to move away from tracking. Through questionnaires, interviews, and site visits, they discovered clues to the process of untracking, what it takes to begin to move away from tracking. Their search led to identification of nine ingredients of the untracking process:

- A belief that all students can learn, that untracking is merely a means to the end of greater student learning for all within the context of a democratic school community.
- A belief that systems-level change is possible in schools, and that the removal of tracking necessitates changes in curriculum, instruction, assessment, and other areas of the school.
- A belief in high expectations for all students and in inclusive practices in all aspects of school life. Schools develop practices that acknowledge the success of all students and that guarantee that a wide range of students participate in all school activities. They treat students as members of a learning community.
- A partnership between leaders and teachers that leads to agreement on common mission, vision, and goals for the school, which include concepts of equality.
- A commitment to parental involvement throughout the process in genuine ways, such as participation in planning and implementing heterogeneous groups, provision of information to parents, and commitment to institute two-way communication with parents, particularly with those who perceive their children as being "gifted and talented."
- Indications of support from local and state policies that encourage such practices.
- The development of a multiyear plan that allows the numerous steps necessary to prepare for untracking to occur in a systematic, comprehensible manner. Examples of such steps include disseminating research about tracking and alternatives to tracking, visiting other schools with heterogeneous classrooms, developing appropriate curriculum, planning staff development activities.
- A plan to address the multifaceted needs for professional development that accompany this transformation, showing models of how alternatives to grouping can work and providing teachers with general knowledge and specific techniques to facilitate untracking.
- A commitment to phased-in implementation based on what is possible or desirable within the school. Such a phase-in may employ any one of many possible strategies, depending on the specific circumstances and existing organizational structure of the school. (Adapted from Wheelock 1992)

One of the key challenges that must be addressed if schools are to institute learning structures other than tracking is how to meet the needs of gifted students. Johnson and Johnson respond to some of the key objections to cooperative learning raised by advocates for the gifted. They begin by making a distinction between high-ability students (the top 33 percent) and gifted students (the top 5 percent). The needs of these two groups will probably be different, they say, though there is somewhat of a tendency to think of them as one group. These students should not always work in cooperative groups (Johnson and Johnson 1991) and should have opportunities to compete with one another. At the same time, they can benefit from participation in mixed-ability groups. Based on nine studies conducted over the past fifteen years, the Johnsons (1992) have concluded that:

- High-ability students benefit academically from cooperative learning groups. The exchange of ideas within the group is richer, and group discussion enhances the ability to apply information in subsequent situations when working alone.
- Learning cooperatively with lower achieving peers does not decrease the critical thinking and higher-level reasoning of high-ability students. In fact, cooperative learning provides alternatives to drill and practice activities that serve little purpose for high-ability students.
- High-ability students who work cooperatively with others outperform high-ability students who work exclusively in competitive or individual settings. While individual work may lead to quicker mastery of lower-level cognitive tasks, cooperative work results in more higher-level cognitive strategies and reasoning, more sophisticated problem solving, and enhanced retention.
- Low-achieving students do not hinder the learning of high-ability students. By explaining material to others, high-ability students strengthen their grasp of material while they restructure and practice its organization.
- Having high achievers work together does not automatically lead to enhanced achievement. High achievers may not feel compelled to explain their reasoning to one another or to generate alternative explanations or solutions. There is little expectation that one student will teach anything to another in such settings.
- Heterogeneous learning groups are not the best model for transmitting large quantities of material. They are effective for ensuring the quality of thought students develop regarding the material that is presented.
- Heterogeneous groups can have significant social benefits for high-ability students. They can create a setting where academic ability is valued socially, something that rarely occurs in many schools. They can decrease the sense of isolation some high-ability students feel. (Adapted from Johnson and Johnson 1992)

Matthews (1992) suggests six ways to make cooperative learning more effective for high-achieving students, based in part on her discussions with gifted students:

- Design cooperative projects so that all students can interact and contribute equally. Avoid traditional worksheet, "right answer" tasks.

> - Use new curricular materials that involve collaborative practices—projects in which students share creative ideas, build on one another's knowledge, and draw on diverse skills (Cohen [October 1990]; Gamoran 1990). Projects might include: writing workshops, oral histories, guided nature walks, ecology projects, discussions of political issues, plays, science experiments, manipulatives-based math explorations, Odyssey of the Mind competitions, Future Problem Solving teams, and foreign language talk shows.
> - Encourage successful group functioning by including five conditions: positive interdependence, face-to-face interaction, individual accountability, social skills, and group processing. (Johnson et al. 1986).
> - Set authentic group goals that are important to group members....
> - Teach students how successful groups work and how to apply this information to their own groups (Johnson et al. 1986). How to ask for assistance, help others, and take responsibility for group members are important skills (Cohen [October 1990]). Roleplay and model these skills with students.
> - Group students in flexible ways.... Flexible grouping gives the low achievers the opportunity to realize the positive effects of being the "explainer" and provides gifted students opportunities to get to know and work with a wide range of students. (p. 50)

Alternatives to tracking are being pursued in some schools primarily as strategies to increase the educational success of all students. Interestingly, the goal is to increase both equity and excellence. New practices are not being instituted simply to make students feel better about themselves, or strictly to benefit low-achieving students. The approaches being tested are designed, in most cases, with the goal of providing richer educational experiences for all students and bringing techniques formerly reserved for talented and gifted or accelerated programs to all students.

Successful alternatives to tracking help to steer the curriculum away from highly sequenced courses focused on the lock-step mastery of skills and information. The goal instead is a curriculum rich in complex ideas and opportunities for students to pursue multiple paths to common outcomes. To accomplish this, teachers need many opportunities to develop an expanded repertoire of instructional skills. Additionally, provisions must be made for students with special needs. At the same time, alternative assessment and grading practices have to be developed. These new assessments provide information to students that allows them to make continuous progress toward common learning outcomes rather than being consigned to failure at arbitrary points in the process.

SCHOOL-TO-WORK PROGRAMS

The learning environment is changing in another, more fundamental way as well. More learning is taking place off-campus. This phenomenon takes many forms, including project-based learning, field-based studies, mentorships, and internships. And while schools have always had some limited set of opportunities for students to learn outside of school, the scope is now increasing dramatically. Whereas offcampus activities were once at the margins of the school's instructional program, they are now moving into a more central role. Most prominent among these initiatives to take learning into the world are school-to-work programs.

In essence, school-to-work blends the worlds of schooling and work by allowing students to move back and forth while being supported in both environments. This approach is different in several ways from previous programs like cooperative education, work experience, or special trips students took. The most important difference is the conscious linkage between what the children learn in school and how they apply it in the work world. School-to-work is not necessarily a jobs program (though in some cases students get paid while they learn). Instead, these programs replace or update many vocational and business courses in high schools. A student learns concepts then applies them in a work setting, rather than practicing at the school as in a shop or business class.

Goldberger and Kazis (1996) describe what they call "school-to-career" as a strategy that is inseparable from broader high school reform. They note that the primary impetus for school reform comes from "outsiders," namely the business community. Vocational educators, they maintain, "see a threat to their jobs and fear they will be asked to add academic rigor to their courses that goes beyond their training" (p. 547). Administrators may be ambivalent about vocational education to begin with, and not inclined to reinvigorate it since this may draw resources away from academic programs. School-to-career may resolve these tensions.

> This strategy is consistent with the desire to move away from the "shopping mall high school" and toward a more coherent and integrated curriculum. It strengthens the argument for elimination of the general track, which prepares young people neither for college nor for productive work. School-to-career strategies encourage breaking high schools into smaller learning communities. They are consistent with the use of magnet schools and charter schools of thematic approaches for organizing instruction. The pedagogy of school-to-career strategies—emphasizing project-based instruction, active and experiential learning, and the shift to "teacher as

> coach, student as worker"—is also in line with current reform movements. (Goldberger and Kazis 1996, p. 548)

To implement school-to-career programs as a catalyst for reform of the high school's entire instructional program, Goldberger and Kazis advocate a reform agenda based on the following four design principles:

> 1. High schools should be organized around nontracked, thematic programs of study designed to prepare all students for entry into both higher education and high-skill employment through intellectually rigorous practical education.
> 2. Selection of a career-focused program of study in high school should be based on general interests and should not be a high-stakes career decision.
> 3. Work-based learning should be an integral part of the core curriculum for all students, since it yields benefits that school-based education alone cannot provide.
> 4. The integration of secondary and post-secondary learning environments is critical to the development of rigorous programs of career-related education. (p. 550)

Programs of study in this model are organized around industry themes (for example, health care, finance, industrial and engineering systems, arts and communication, tourism and recreation, human resource systems) or more generic themes with academic foundations, such as international studies. The programs do not train students in specific careers, but employers are involved in designing curriculum and establishing the standards for what students should know and do as a result of participating in the theme.

Students explore themes based on individual interests. It is possible to move across themes, rather than being trapped in one area until graduation.

> This approach is already in use: it is how many of the nation's most innovative school-to-career programs are organized. These include career academies in California, Philadelphia, and elsewhere that focus on a single industry; Roosevelt High School's Renaissance 2000 project in Portland, Oregon, which is organized around six career pathways starting ninth grade...; Boston's ProTech, which began as a program in health occupations and has expanded to include other career pathways, including financial services, communications, and utilities; and the Rindge School of Technical Arts in Cambridge, Massachusetts, which uses a range of school- and work-based experiential learning programs to give students focused opportunities to explore career options and develop specific technical skills. (Goldberger and Kazis 1996, p. 550)

Raby (1995) offers a more detailed description of "career academies." They are

> school/business partnerships that offer high school students a rigorous academic/technical curriculum, employability skills, career counseling, work experience, enrichment activities, and mentoring. Career academies' programs are designed to ensure that their graduates are academically and technically proficient, have marketable job skills, and are academically prepared to enroll in postsecondary education. (p. 82)

She describes the California Partnership Academies, forty-five state-supported programs that seek to improve educational success and career opportunities for unmotivated young people from disadvantaged educational and socioeconomic backgrounds. The academies restructure the learning environment to:

> - Provide an integrated curriculum that shows the relevance of academic subjects to work experience
> - Give autonomy to teachers to exercise their professional expertise and judgment in curriculum development
> - Develop partnerships with business to provide mentoring and paid work experience to help students make a smooth transition from school to the workplace...
>
> Academy students are enrolled in a core academic program, consisting of English, mathematics, science and/or social studies, and a technical course in a career field local businesses agree to support. Examples of career fields include electronics, health, business technology, agribusiness, media, environmental science, retailing, graphic arts, and law and government. The content of the core academic courses and the technical course is integrated and taught in a school-within-a-school environment. Academies have a strong career development component that stresses job readiness skills, career planning, job interview techniques, and applying to college. A mentor program that includes firsthand exposure to career information is supplied through the partnership with local businesses. Students enter the program in the tenth grade and those meeting academy standards are rewarded with jobs in local businesses in grades 11 and 12. Students remain with the same teachers the entire 3 years in the program. The curriculum is demanding and focuses on critical thinking, problem analysis, and practical work simulations....
>
> Although schools have primary responsibility for the development of curriculum in the academies, representatives from business actively participate in its definition. They work with teachers to identify the academic and technical competencies students need for employment in their industry. Teachers integrate the competencies with the academic work and include practical experience in applying skills taught in the course to career situations. Students receive a foundation in a particular career area in the school's technical coures, while specific job training is provided by the employers during the student's work experience. (Raby 1995, pp. 83-84)

Work-based opportunities are a key component of the school-to-work model. Exposure to work follows a developmental sequence, beginning in the early grades when representatives from the work world visit the classroom and students participate in visits to workplaces (field trips), job shadows, and community-service projects. Hands-on experience in the workplace commences in earnest near the end of the traditional high school years as students begin a gradual, supported transition from schooling to work while still retaining the ability to change their minds and career goals based on the lessons they are learning in the workplace. These young people also have many more personal contacts with adults in roles other than teacher or parent.

Since school-to-career emphasizes the learning that takes place both in the classroom and on the job, learners have more opportunities to see how a business works (Sommerfeld 1996). They may rotate through a series of jobs, observe as well as work, be given special responsibilities they would not ordinarily get if they were hired as workers, and participate in discussions with managers and workers at all levels of the company. Such experiences let them learn more about adults, develop personal relationships with them, get advice, and come to understand the transition from dependent child to independent adult that they are just beginning in earnest. Students also see the different roles workers have and can develop their career goals accordingly.

The best experiences offer students the chance to understand not just work but companies as well—to see them as systems or organizations with an overall purpose or goal. This perspective is invaluable once they enter a company and have to understand how their actions and decisions will affect their company's success.

Boston's ProTech program is a good example of how such work can be organized to provide a range of experiences and perspectives to students to help them either expand or focus their career interests:

> In [the] ProTech program, for instance, students spend the last year or two of high school rotating through at least three different areas of a hospital, learning skills in the context of paid training experiences. By the middle of the senior year, students are expected to firm up their career plans. Those who opt for a technical position, such as diagnostic-imaging technical or respiratory technician, will be able to combine hospital-based training and paid work with their postsecondary studies. Students who wish to work full-time or to pursue less than an associate's degree will have access to such hospital jobs as multi-skilled patient-care technician or pharmacy technician. Students who decide on four-year degree programs in health care, such as pharmacology or physical therapy, will enter these programs as seasoned health-care workers familiar with the industry. (Goldberger and Kazis 1996, p. 552)

School-to-work programs require a new relationship with employers, an issue that will be considered in more depth in chapter 15.

INCLUSION OF SPECIAL-EDUCATION STUDENTS

Another alteration in the structure of the learning environment that is being seen in some schools is a movement to include special-education students in regular-education classrooms to the maximum extent possible. Along with detracking, this trend represents a major challenge to the organization of the learning environment as it currently exists in most schools.

The complexity and emotion surrounding this topic are such that it is impossible to provide an adequate treatment of it in a work such as this. The inclusion of special-education students into regular-education classes, combined with attempts to eliminate or modify tracking or ability grouping, creates a tremendous challenge for traditional classroom structures and teaching methods at all grade levels. And while efforts are under way to develop models such as consultative teachers and joint-planning teams, a tremendous amount of work remains to be done before American classrooms can hope to accommodate wide ranges of student ability successfully.

The pressure for inclusion comes in part from democratic principles of equal treatment for all students and in part from the limited success of pullout programs to achieve the goal of enhanced educational achievement for special-education students of some types, particularly learning disabled. This movement applies to all pullout programs, including Chapter 1 and other remedial approaches that remove the student from the regular classroom. Miller (1990) suggests that it may be possible for classroom teachers and special-education teachers to form a partnership to support and benefit from school-reform efforts.

Programs of school restructuring may provide the forum within which long-held beliefs about the nature of children and how they learn can be challenged, and alternatives can be explored. Such an environment may be necessary to permit the types of changes that appear to be necessary to support the full inclusion of the entire range of student ability in one classroom. Traditional models of instruction that beam a lesson just above the perceived ability level of the midpoint of the class have little utility in such inclusive environments. Yet the alternatives require not incremental adjustments, but fundamental reorganization of curriculum, instruction, and assessment, and redeployment of resources, including professional staff, reconfiguration of time, integrated use of technology, and redefined parental involvement. The discussions of mainstreaming and full inclusion serve to highlight the challenges the educational system faces in its attempt to meet the needs of all students to function at high levels cognitively and socially.

Case (1992) contends that special education serves to "rescue" the traditional system. Operating from the medical model, special education diagnoses and prescribes treatment based on the needs of each individual. However, the system in which the child exists and to which she or he must return is not examined or affected:

> Problems with the instructional setting have not been analyzed; changes needed in classroom instruction have not been specified; and special education intervention has rarely been targeted to improve learning in the classroom. Children's learning has been jeopardized because the basic system that is ineffective for them is left untouched. Because the child, not the system, is defined as the problem, children remain dependent on special education. We are caught in a self-perpetuating system of dependence on special education and are hard-pressed to break the cycle. (p. 33)

Suggestions are being proposed for how school systems might proceed to modify and adapt, rather than abandon, special services for those students who truly need them, while at the same time improving the quality of instruction all students receive. Danielson and Bellamy (1988) note that between 1976-77 and 1984-85 "the number of U.S. students identified as learning disabled increased 127 percent." Wang, Walberg, and Reynolds (1992) propose several changes that need to occur in the immediate future for special education to better serve students with special needs:

- The enhanced use of effective instructional practices that are based on student achievement needs; materials and procedures that allow students to proceed at their own pace; frequent assessment of student progress; additional time for those who need it; enhanced student responsibility for monitoring and guiding their own learning; and learner goals that students can work cooperatively to achieve.
- School environments that monitor student progress more closely; are more aware and mindful of student characteristics; assess which programs are working and which are not, which need to be improved, which need to be abandoned, and which need to be extended; use outcomes against which students can compare their individual achievement to a greater degree; and have less need to categorize children.
- More effective use of technology to allow special-needs students to work at home as well as at school, on weekends and during the summer, and that give parents better information about student progress.
- The elimination of separate teacher preparation to deal with special-education students, and in their place programs that train all teachers to deal with all students.

- Increased coordination with and integration of health and welfare agencies and programs into the school.
- Coordination among all levels of government to support coherent programs that serve all students. (Summarized from Wang, Walberg, and Reynolds 1992)

Wang and colleagues suggest that the disjointed nature of educational services generally, and those for special-education students specifically, has led to a loss of focus on the needs of the learner. Improvement might be achieved through the use of "waiver for performance" strategies (Wang, Reynolds, and Walberg 1988). States could allow districts to experiment with enriched regular-school programs in broad noncategorical or cross-categorical programs in return for providing data showing enhanced pupil learning outcomes.

> In their reform efforts, district schools have focused primarily on structural changes and program enhancements. Because teaching positions are now blended, job titles such as Chapter 1 teachers or special education resource room teachers no longer exist. Support teachers—called "learning support"—are funded out of several sources. In addition, teachers are using different grouping strategies such as within-grade, cross-grade, multiage, and in-class services....
>
> Schools have also concentrated on the causes of student failure by attempting to enhance learning opportunities. For example, they are exploring options in cooperative learning, study skills, social skills, learning styles, self-concept, thematic curriculum, guidance support, and peer/teacher tutoring. (Fink 1992, pp. 42-43)

Integrating special-needs students into classrooms represents a unique challenge to educators, since these students represent two distinctly different groups of children. One group is composed of those who have never before been included in public school classrooms with any regularity; among these are students with severe and profound disabilities of a physiological or neurological nature. These children have been in special schools or programs devoted to and organized around their needs. Regular-classroom teachers have little idea of how to cope with such students. Programs of integration for these students will need to be of one type, since teachers have few experiences or reference points to draw upon in responding to the needs of such children.

The other group of students only recently were withdrawn from regular education but are now returning. These include children with learning disabilities and those who are emotionally or behaviorally disturbed. Such students were a part of regular education until the midseventies and the passage of P.L. 94-142. Since that time numerous special programs have been developed for such students. Data from three studies suggest that these students may be having a difficult time finding success in restructured schools that have made attempts to reintegrate them into regular classroom settings (Zigmond and others 1995). The authors found that students with learning disabilities were able to achieve at a rate necessary to begin closing the achievement gap between themselves and national reading norms at rates varying from 23 percent to 64 percent.

> Results revealed differences across the three projects, with 53% (Pittsburgh), 38% (Washington), and 62% (Vanderbilt) of students with learning disabilities gaining ground on their peers. Overall, [61%] of the target group had moved up in relative standing; the other [39%] lost ground. (Zigmond and others 1995, p. 539)

Although it is difficult to compare these results to those achieved in schools that are not restructuring, since such schools are seldom evaluated so thoroughly, they are indicative of the challenge faced by schools that hope to increase the achievement of all students by placing them into mainstream classroom settings.

Kauffman, Lloyd, Baker, and Riedel (1995) argue that the strategies to teach special-education students successfully are known and that schools need only follow them more closely. Such programs, they assert, can be used in essentially any educational environment. Characteristics include:

- Systematic, data-based interventions
- Continuous assessment and monitoring of progress
- Treatment matched carefully and specifically to the nature and severity of students' problems
- Multicomponent treatment
- Provision for frequent guided practice of academic and social skills
- Programming for transfer and maintenance
- Commitment to sustained intervention (pp. 543-544)

Kauffman and others (1995) conclude that the key is to focus on the needs of the child, not the philosophy of the school:

> A narrow, highly restrictive definition of inclusion requires that all individuals occupy a common space, regardless of whether that space has the features appropriate for their needs; it assumes that every place can be structured to serve every individual's needs. A more adaptive and humane definition of an inclusive school system is one that allows for a variety of placements that offer the conditions under which every individual feels safe, accepted, and valued and is helped to develop his or her affective and intellectual capacities. (p. 545)

To be successful, the integration or reintegration of special-education students will require a change in the culture of schools. Inclusion of these students implies teachers will see themselves responsible for the education of *all* students, and for knowing which methods are working for which students. Such a transformation will be exceedingly difficult to achieve in environments where teachers work in isolation from one another, set different standards of success, and hold differing expectations for appropriate student behavior.

Also contributing to the complexity of change will be parent groups that support the rights of special-needs students. These groups are well organized and influential. Some are viewing the movement toward greater inclusion with a cautious eye "because they fear losing the hard-won rights and special education services" they have gained over the past fifteen years (Viadero, November 4, 1992).

CONCLUSION

All these changes in the learning environment hold a common thread. A shift is taking place in which the learning environment is being designed with less attention to meeting the needs of the adults conducting the learning and more attention to meeting the needs of the students engaged in the learning. Carrying out this shift requires a delicate balance between engaging/empowering the learner and simultaneously maintaining standards for performance. Humane environments can become indulgent ones; environments with high standards can become dehumanizing ones. The linkage between changes in the learning environment and those in standards, curriculum, instruction, and assessment become clearer within such a framework.

Changing the learning environment can help to reconceptualize relationships between students and subject matter, and between children and adults. By instituting such changes, material can be made more meaningful to students, and the quality of human relationships within a school can be improved for all participants. Such changes are difficult since they require substantial rethinking by all participants in the learning process. Teachers must reexamine their assumptions regarding the distribution of ability among students and the innate ability of all students to learn. Administrators must reconsider the rationale they employ when designing specific structures for organizing schools. And students must take responsibility for and control over their own learning.

CHAPTER 14

TECHNOLOGY

The most striking observation one reaches about technology in education over the past dozen years is not its impact but its lack of impact. Information technologies have been adopted in the central offices of most midsized school districts, particularly in business offices and, to a lesser degree, in school offices where they are used primarily to manage data on students and schedules. To be sure, there are many more computers in schools than there were ten years ago. But technology has not revolutionized learning in the classroom, nor led to higher productivity in schools.

In an edition of *Macworld* magazine entitled "America's Shame: How We've Abandoned Our Children's Future," Jerry Borrell, editor, describes his magazine's research on the use of computers in schools and the concerns it raised:

> We debated whether we should invest more effort developing a story on how America is using personal computers in schools. Department of Education statistics told us that America made significant progress toward introducing personal computers in primary and secondary schools during the 1980s, that more than 50 percent of all children in grades 1 through 8 use computers at school.... Remarkable findings. Too remarkable....
>
> ... [W]e decided to look further, to visit schools across America, to talk with policymakers in Washington, and to talk with professional associations for teachers and educational administrators. What we found is a false dependence on statistical analysis and a reality so discouraging that it made us question how this situation has remained unremarked on for so long. Antiquated computers; unused computers; computers used for games and not for teaching; schools and teachers unprepared to use computers that they own; mismanaged or misdirected policies; and unknown hundreds of millions of dollars spent over the last decade for little return. (Borrell 1992, p. 25)

Conditions have changed little since Borrell's review in the early 1990s. Mehlinger (1996) reports that

> By 1994 the ratio of students to computers across all grades was 41 to 1. Thus, while there has been rapid growth in the number of computers in

> each school, the opportunity for a typical student to have access to a computer is still limited. For example, as late as 1989 a student might have had access to a computer for one hour per week— about 4% of instructional time. (p. 403)

News media, boards of education, and parents often focus on the ratio of computers to students as an indication of technology use in schools, and these ratios do continue to drop. Many districts have gone on purchasing binges to acquire more computers, but in most cases these also become obsolete quickly as new software demands more RAM, more disk storage, and greater speed.

Even technologies that have remained relatively stable, such as CD-ROM, have increased their speed four-fold and more, a critical difference in learning situations where children's attention spans may be limited, and schools are ill-prepared to update their equipment.

Although large hardware purchases seem to assuage parents who then see computers in the school, they do not address issues of software and, more important, of training teachers in the use of computers and the integration of technology into the curriculum. Ratios of computers to students do not tell us anything about how (or whether) the machines are being used, about teacher technological literacy, or about whether changes have occured in other vital areas of schooling, such as curriculum, teaching techniques, and structure of time, to allow technology to achieve its full potential.

The only technologies that have firmly taken root in most schools are the copier (which simply replaced the ditto machine) and the videotape recorder and television monitor (which replaced the 16mm projector and screen). In the vast majority of schools, telephones are only now becoming available to teachers, and often this occurs because of safety concerns, not as a part of a technology plan. Voice-mail systems are beginning to be seen in schools. Fax machines are a part of most central offices and are now appearing in school buildings. It is interesting to note that these forms of telecommunications are often not even a part of a district's plan for technology, because parents, teachers, and community members usually associate technology with only one thing: the computer.

THE ACOT PROJECT

The computer may be the only image that comes to mind when the issue of technology is raised, though this appears to be changing. Much of the evidence on computer use in schools over the past decade indicates the computer will not single-handedly revolutionize teaching and learning. Dwyer, Ringstaff, and Sandholtz (1991) describe the Apple Classroom of Tomorrow (ACOT), one of the most extensive projects for classroom implementation and integration of computers. Even with the benefit of this carefully designed, resource-rich program, teachers took quite a while to move away from familiar ways of approaching teaching.

> What we witnessed during the [first year of the project] was the adoption of the new electronic technology to support traditional text-based drill-and-practice instruction. Students continued to receive steady diets of whole-group lectures and recitation and individualized seatwork. Although much had changed physically in the classrooms, more remained the same. (p. 47)

Dwyer and colleagues describe how the integration of technology brought about gradual changes in the mix of teaching techniques:

> The new technology became thoroughly integrated into traditional classroom practice. Lecture, recitation, and seatwork remained the dominant forms of student tasks; but these were supported 30-40 percent of the time with the use of word processors, databases, some graphic programs, and many computer-assisted instruction (CAI) packages. (pp. 47-48)

The popularity of CAI packages indicates that computers are being used to continue the teacher's control over the curriculum and to impose the structure of the curriculum on the learner via the computer, rather than allowing the learner to create meaning from the wealth of information the computer is able to make available. In the ACOT project, it wasn't until the second year that a cadre of teachers emerged who began to provide instruction that was informed by a comprehensive understanding of the full potential of technology. After they mastered the technical dimensions of the machines, they were ready to experiment with new methods of teaching.

> As teachers reached [the point where they mastered the technology] independently of each other, their roles began to shift noticeably, and new instructional patterns emerged. Team teaching, interdisciplinary project-based instruction, and individually paced instruction became more and more common at all of the sites. To accommodate more ambitious class projects, teachers even altered the foundation of the traditional school day: the master schedule.... [T]his type of teamed, project-based learning activity opened up opportunities for teachers to step back and observe the results of their own pedagogic shifts. What they saw was their students' highly evolved skill with technology, ability to learn on their own, and movement away from competitive work patterns toward collaborative ones. (pp. 48-49)

The ACOT project serves to demonstrate the difficulty associated with the introduction of any new instructional method or material into classrooms. The researchers themselves admit that they may have underestimated the complexity of introducing change into the classroom:

> In the early days of the introduction of computers to classrooms, everyone seemed to focus on the innovation: computers and software. Little thought was given to the elements that would most likely remain the same: instruction, student tasks, and assessment. In many ways the early progress of ACOT repeated the error. Although the sheer number of computers in ACOT classrooms radically transformed the physical environment, for the most part student learning tasks remained unchanged. (pp. 46-47)

In a subsequent report on ACOT, Dwyer (1994) presents a positive assessment of the impact computers are having in ACOT classrooms after four years. He observes more student involvement and control of learning, more curiosity in what others were learning, and more excitement. At the same time, he hints that technology alone will not be enough to transform schooling. He quotes an early report by one of the project's research associates that illustrates this point:

> Children interacted with one another more frequently while working at computers. And the interactions were different—the students spontaneously helped each other. They were curious about what others were doing. They were excited about their own activities, and they were intently engaged.
>
> These behaviors were juxtaposed against a backdrop in which the adults in the environment variously encouraged and discouraged alternative patterns of operating. It was as if they were not really sure whether to promote or inhibit new behaviors. (Phelan cited in Dwyer 1994, p. 6)

Finding the proper uses for technology, the proper ways to measure the learning that results, and the proper adjustments in the ways teachers teach with, through, or around the technology continues to be a challenge. Computers alone do not seem likely to cause dramatic changes in student learning if the primary measure is a standardized test. Even in the ACOT classrooms, which were truly computer-rich, students tended to do about as well on standardized tests as they might have been expected to do without the computers, though some clearly excelled. Districts that expect to spend millions on computers and see an instant increase in student learning are likely to be disappointed.

Changes appeared to be somewhat more difficult, or at least more subtle, in ACOT's high school classrooms.

> Today, if you observed ACOT's 125 students in 9th through 12th grade at West High School in Columbus, Ohio, you would still see relatively traditional high school activities: lectures and recitations, writing assignments, and math problem sets. But you would also notice differences even in those basic activities. Students deliver lectures along with their teachers,

> and they take notes on portable computers—with the soft clicking sounds of keyboards filling in lecturers' pauses. (Dwyer 1994, p. 7)

I leave it to the reader to determine if changes of such modest magnitude will justify the expense and effort required to integrate computers into secondary schools. While laptops are clearly a superior tool for notetaking in most cases, and evidence exists that they make a significant difference for certain student populations, the question remains whether using them to take lecture notes is going to transform student learning. High schools in particular have yet to adapt teaching and learning to take advantage of the inherent strengths and opportunities offered by small portable computers.

Collins (1991) identifies eight major trends that often accompany extensive use of computers in schools, as I have summarized below:

1. *A shift from whole-class to small-group instruction.* In another study of the ACOT project, Gearhart and her associates (1990) reported "a dramatic decrease in teacher-led activities and a corresponding increase in independent or cooperative activities."

2. *A shift from lecture and recitation to coaching.* There is evidence of a movement from didactic to constructivist approaches to learning. Schofield and Verban (1988) point to the switch by teachers from second-person grammatical constructions ("You should do this") to first-person constructions ("Let's try this") as evidence of this shift.

3. *A shift from working with better students to working with weaker students.* There is evidence to suggest that in whole-class instruction, teachers carry on a dialog with the better students in the class. In classrooms where students are utilizing computers individually, researchers have seen evidence of teachers increasing the attention they pay to weaker students by a significant amount (Schofield and Verban 1988).

4. *A shift toward more engaged students.* In classrooms where computers are accessible to students to use for long-term activities or projects, "researchers have reported dramatic increases in students' engagement" (Brown and Campione forthcoming, Carver 1990, Scardamalia and others 1989).

5. *A shift from assessment based on test performance to assessment based on products, progress, and effort.* Teachers are beginning to require students to solve problems before they move on to the next level of complexity in the curriculum, and to evaluate projects based on the products that the students produce. Teachers are still developing the standards and skills to assess student work against outcomes and effort, rather than factual knowledge.

6. *A shift from a competitive to a cooperative social structure.* When students are working on a common database, or on projects which utilize the same database, there is more sharing of information, problem-solving, and communication among students (Brown and Campione, forthcoming, Newman 1990, Scardamalia and others 1989). By contrast, when students work on Integrated Learning Systems, where each is working independently to master factual information, there appears to be an increase in competition (Schofield and Verban 1988).

7. *A shift from all students learning the same things to different students learning different things.* A curriculum that requires all students to learn the same things naturally ends up focusing upon the things that students have not learned, and directs student effort toward their weaknesses rather than their strengths (Drucker 1989). While there are areas of instruction where this may be quite appropriate, for many students their entire education consists of constant focus on their weaknesses, and no attention to strengths. Access by students to large, diverse databases, coupled with the opportunity for students to make some choices of what is of interest to them allows students to share information and to develop areas of strength and interest (Foster and Julyan 1988, Pea forthcoming).

8. *A shift from the primacy of verbal thinking to the integration of visual and verbal thinking.* Computers, electronic networks, television, and multimedia educational systems are providing a new type of "electronic literacy" that allows people to think differently than they did when restricted to print material as the primary means for transmitting ideas and thoughts at a distance. Much as the invention of the book changed the way in which people think, so too will the extensive use of electronic, visual information. Schools have yet to adapt their methodologies to this changing reality.

SOME OFTEN-OVERLOOKED TECHNOLOGIES

Telephones, fax machines, calculators, and video cameras are less glamorous than computers, and for that reason their potential benefits for instruction often go unnoticed. While schools flock to install satellite dishes and to hardwire for computer networks, the most basic form of telecommunications, the telephone, often remains overlooked as a potential tool, both for teacher productivity and student learning. Telephone lines possess the ability to carry voice, electronic, and visual data. The telephone can serve as a tool for better communication between teachers and parents. If phones are available, teachers will use them. If they are inconvenient to use, teachers will be much less inclined to make repeated efforts to reach parents, for example.

Use of the phone goes beyond normal teacher-parent or even teacher-student communication. Some devices enable teachers to leave recorded messages, such as the day's homework assignments, which parents may access by punching a predesignated code for each particular teacher. Soon it will be feasible to assign codes to individual students, if the parents and teacher believe that regular messages are needed. Schools can also use such equipment to provide a verbal "bulletin board" of upcoming events and needs. Such technology pays for itself in reduced mailing costs and increased efficiency in the transmission of important information.

Phone lines also allow students to communicate with others in the local community and around the world. Conference calls allow direct, real-time communication; computer networks, like the National Geographic's Kidnet, allow electronic communication. Online databases can also be accessed through conventional phone lines, putting vast amounts of information at the fingertips of teachers and students. And recent developments in video-transmission technologies are allowing phone lines to transmit video images to accompany a conversation. Although the advent of "wireless networks" is just around the corner, the phone line can play an important role, particularly in schools where the expense of more exotic hardware and wiring cannot be justified yet.

Access to a telephone line also creates the capability to employ a fax machine in a variety of ways. As these machines become more ubiquitous, new uses for them will surely be found. For now, they allow for the transmission of printed information from school to school almost instantaneously. Using a fax machine, students working together on a network can transmit information (such as writing, drawings, local newspaper articles, and other forms of data that would be cumbersome to transfer to the computer) to one another to enliven discussions or focus investigations.

With the capacity to beam messages to predefined groups of users with a single command, a fax machine could allow a teacher to communicate with all parents simultaneously, when or if we reach the point where most parents have such machines. A facsimile of an individual child's work for the day could be quickly transmitted to parents while the original remained at school. Parents could comment on an upcoming assignment or offer a critique of their child's work, which could be returned to the teacher and incorporated into the next day's lesson.

The video camera, a powerful, accessible tool for curriculum development and student expression, is used sparingly and is viewed more as a toy than an educational tool. It is ironic that video is largely ignored at the same time that students spend large blocks of their leisure time viewing information from video sources. Visual images are an increasingly important part of students' lives, and of most workplaces, yet video clearly remains on the fringes of instruction in schools. Low-cost editing equipment and small portable cameras with relatively sophisticated technical features enable children and adults to collect and organize visual information with relative ease. Advances in multimedia technologies are leading to the integration of video and computer-based information.

Telecommunications in the form of satellite transmissions, generally referred to as *distance learning*, along with interactive computer networks, are being employed by more and more schools throughout the country. This combination is especially appealing to rural schools as a source of learning experiences they are otherwise unable to offer. Interactive distance learning also offers a way for students to communicate with other children in very different environments, thereby counteracting the sense of isolation often present in rural settings. While telecommunications may prove to be a powerful tool for restructuring, its use at this point is primarily to expand, not to change, the existing curriculum by offering courses such as physics or French to schools not otherwise able to offer them and by employing traditional instructional strategies.

As educators become more familiar and comfortable with the potential inherent in distance learning and computer networking, and as more schools purchase the equipment necessary to participate fully in satellite uplink-downlink and computer networks, it is likely these technologies will be employed to restructure as well as expand the curriculum. If nothing else, telecommunications allow rural schools to adapt rapidly (sometimes more rapidly than their larger urban cousins). For example, rural schools with interactive capacity are offering courses in foreign languages such as Japanese and Chinese. These courses are taught by highly trained teachers, often native speakers, while urban schools, relying on their own teachers, may have to limit their offerings to the "traditional" European languages.

Even devices as simple as calculators have not yet been fully integrated into some schools. Calculators now come in numerous sizes, shapes, and forms, including sophisticated graphing calculators. Rather than being restricted to math classes, calculators have the potential to be used in many different learning settings, to make measurements, verify results, check hypotheses, analyze data, or record observations. Such uses make it feasible for teachers in disciplines other than math to require calculator use, and, ideally, to coordinate their efforts so that each does not have to teach calculator skills. Parents in some schools still object to calculators, since they view them strictly as tools to replace basic addition, subtraction, multiplication, and division. They worry students will never memorize these basic skills. Schools have not been very effective in presenting this type of parent with a broader view of the potential and role for calculators in the total curriculum.

THE EVOLUTION OF INTEGRATED LEARNING SYSTEMS

The Integrated Learning Systems (ILS) that came into being in the mideighties were often based on the use of computers in a centralized lab as tools for individual student work on a common structured curriculum, generally containing liberal doses of drill and practice. David Conley (February 1991) describes how these systems were primarily another example of substituting a new technology for an old one without changing the basic dimensions of teaching and learning:

> For some schools, the vision for technology is to move the fact-based, textbook-driven curriculum to a disk, allowing each student to move through this material individually on a computer, with the teacher monitoring on a central machine. These Integrated Learning Systems (ILS), or Integrated Instructional Systems (IIS) are developed by large corporations, many with ties to the textbook market. [Major producers include: Jostens Learning Corporation, WICAT Systems, Wasatch Education Systems, New Century Education, Ideal Learning, Computer Curriculum Corporation, Computer Networking Specialists, and Computer Systems Research.] They are touted as tools for increasing teacher "productivity"; one teacher can monitor several students simultaneously. The curriculum is designed by the corporation based on its conception of what each age group "should know." It is a mastery-based approach, which can be very valuable for certain portions of the curriculum with certain students in certain situations. The danger is that, having made major investments in hardware and software for these centralized labs, there will be pressure to keep them occupied with students. They will come to drive the curriculum.
>
> Programs that integrate math, English, social studies, and science already exist. Their emphasis is on the mastery of factual material at a knowledge and comprehension level. How much time students can spend at these learning stations before "productivity" declines remains to be seen. However, once this technology is purchased, the commitment to use the materials in their current form and for the goals specified is relatively irrevocable.
>
> The appeal of the IIS is evident, particularly to local boards of education, whose members are frequently business people to whom the "efficiency" of such systems generally appeals. (p. 29)

These systems may now begin to experience dramatic changes as manufacturers move to incorporate CD-ROM technologies and to allow teachers to have much greater control over the content and activities delivered to students. The use of CD-ROMs with ILS means that much greater amounts of information can be made available to students and more sophisticated learning tasks developed. "Open architecture" designs allow teachers to combine elements from different programs into more highly integrated and interesting learning experiences and to tailor experiences to individual students with relative ease. They can choose among existing learning objectives or create their own. Teachers have all the elements necessary to design an entire course within the system (Greenfield 1991).

This new generation of Integrated Learning Systems can play an important role in schools attempting to personalize learning while still ensuring that all students learn certain skills. Skillful use of such environments both as centers for student exploration and construction of knowledge and for more highly structured drill and practice offer the potential to allow students to take much greater ownership of their own learning while simultaneously enabling teachers to monitor student mastery of key skills and knowledge. Ideally, such environments could function as resource centers where students go to acquire a skill as needed to complete a project or learning experience successfully. This potential to obtain knowledge or skills "just in time," to be able to see the utility of what was being learned, and to be able to apply it almost immediately creates an opportunity to produce powerful learning experiences, where students are more likely to integrate and retain what they learn.

An exhaustive evaluation of the ILS as a learning tool by Van Dusen and Worthen (1995) reveals both its potential and the complexity of making this innovation work successfully as a tool for student learning:

> Recently, some ILSs have moved beyond... simple drill and practice by adding materials that require students to delve into complex problems in ways that promote deep reflection and genuine understanding (Becker and Hativa 1994). For example some systems include scientific simulations that teach the scientific method by illustrating the beginning of an experiment and requiring students to hypothesize about outcomes before completing the simulation. Some language arts lessons encourage discovery learning by allowing students to explore topics through a branching program before defining a specific vocabulary or presenting the overall theme.
>
> Such ILSs follow more of a constructivist view of learning by providing a rich learning environment. Word processing programs, spreadsheets, mathematical graphing programs, encyclopedias, and thesauruses are only

> a few examples of the software and other resources that allow students to construct meaning and enhance critical thinking.... (p. 28)
>
> Proponents of these systems argue that they improve student learning. Whether or not one views research as supporting this claim depends in large part on the type of evidence one chooses to trust....
>
> Of the studies that did examine student learning outcomes, many reported large gains on standardized test scores (Trotter 1991). However, Becker (1992) has noted methodological flaws in many of these studies and, in a meta-analysis of nearly 100 of them, concluded that they provide little conclusive evidence of ILS impact on achievement. Where differences were found between the achievement of ILS users and comparable non-users, Becker concluded that they were too small to have any educational significance.... (p. 29)
>
> We believe the reason prior research results are equivocal may be that they have underestimated the impact of these systems.... We believe that the "no impact" findings may reflect a failure of such studies to examine one very critical question: Has the ILS been implemented correctly and in the manner its designers proposed as necessary for its effectiveness?
>
> This underutilization of such systems... has been documented (Sherry 1990).... In none of the sites participating in our study was the ILS being used to its full potential. In some schools, students were spending as little as 10 minutes per week on the system!...
>
> The findings from our study show that an ILS—if used appropriately—has real potential for improving student achievement. (p. 31)

However, Van Dusen and Worthen note, for these positive results to be realized, a number of things must happen in concert. Schools that have made effective use of an ILS have attended to the following six criteria:

- They have made use of a sound implementation guide.
- The have an appropriate hardware configuration, either in a central lab or distributed, based on the needs of the school.
- They allow students adequate time on the ILS, in some cases a substantial portion of their day, or at least 30 minutes.
- They have enough equipment, roughly one for every 3 students.
- Their teachers integrate the ILS into their classroom learning activities.
- They have administrators who support use of the ILS, including up to two weeks of training in its use.

This research indicates that the ILS can be effective, but also suggests the complexity of achieving success with an ILS and the need for a high degree of teacher buy-in into its use. Schools where administration purchases and installs such expensive and complicated systems without regard to teacher attitudes could find themselves frustrated and disappointed. Schools should give careful thought before venturing down the ILS path, if for no other reason than it will lock up most of the resources available for technology essentially indefinitely. The software required to run the system is generally licensed on a yearly basis to the districts. This annual licensing fee can be hefty. Changes in the software can dictate hardware purchases, thereby further limiting a school's options. On the other hand, a school where staff are clearly committed to using the ILS as a central means of organizing and tracking student learning can hope to find it a useful tool.

These examples suggest that technology could have a significant impact on instructional practices and goals, both to improve current practices and to restructure them. As mentioned earlier, the impact of technology to this point has not been significant in most schools either in terms of improvement or restructuring. It has been common to merge technology into the program without disrupting established routines or ways of thinking. Even the computer has been incorporated in a way that allows the current structure of learning to remain intact. Levinson (1990) offers two scenarios of how technology might become integrated into public schools, one suggesting how technology could change learning fundamentally, the other extending current practices out into the next decade:

> Students and teachers with a common interest, though miles apart, meet in a teleconference. Voice mail provides individual contact between teacher and student. An expert in learning styles uses a sophisticated program to diagnose the special needs of children in three school districts on one day. At computer workstations, teachers customize instruction, maintain contact with parents, and handle administrative chores. Networks and groupware allow students to work across classroom boundaries; CD-ROM technology puts huge libraries at everyone's fingertips; videotapes and satellite transmissions encourage multisite instruction, freeing classroom teachers for coaching and small-group work.
>
> Consider a second scenario....
>
> It is the year 2000. Every student has a personal computer linked to a local network; every teacher has a computer workstation to monitor student progress and record grades; every classroom is linked to the media center for video. But the organization of the school and the patterns of student/teacher interaction remain the same—except that now they are computer-mediated, perhaps slightly more efficient, certainly more complex to manage....
>
> Which scenario will prevail? A strong case can be made that elementary and secondary educational institutions will co-opt the complex and central changes necessary to make the vision of technology-mediated education a reality. These institutions may instead use technology to replicate the status quo, supporting or streamlining current modes of

> operation—or school systems may introduce incremental changes that create more complexity without achieving greater effectiveness. (pp. 121-22)

In other words, technology per se is no guarantee of a better, or even a different, education for tomorrow's students.

EMERGING MULTIMEDIA TECHNOLOGIES

One of the most promising of the rapidly emerging technologies is multimedia. Multimedia combines computer, video, audio, and other sources, such as online data, in a way that allows users to interact with information and make decisions about how and what they learn. Like many recent technologies, multimedia has received considerable hype as the next tool to revolutionize education and schooling. Stansberry (1993) anticipates teachers' response to this hype and explains the potential value of multimedia:

> Try telling teachers that multimedia will revolutionize the American classroom, and chances are that their eyes will roll toward the ceiling. It's a promise that educators have heard before, about everything from the overhead projector to closed-circuit TV....
>
> Educators realize, however, that the new technology is here to stay, like it or not. They know they must prepare their students to survive in a computerized workplace. For many teachers, as well as students, the enticements of the new media are hard to resist. Unlike earlier educational computing efforts, in which rote learning exercises were pretty much moved verbatim from the page to the screen, many new applications introduced to K-12 schools attract students with images and sound, involve them with interactivity and feed their minds with vast stores of hyperlinked data.
>
> Many new applications go hand in hand with constructivist learning theory, which holds that in today's fast-changing world the ability to analyze and solve a variety of problems quickly is more important than applying memorized information. And the best way to teach the conceptual thinking required for these tasks is through a system of inquiry in which the student is immersed in hands-on, real-world situations and asked to provide solutions.
>
> Interactive multimedia—with its potential for engaging the user—may well be the perfect support medium for such a process. The new applications invite students to navigate their own paths and explore connections among disciplines that might not have been obvious. Many programs encourage students to rearrange provided media objects or generate their own to create original presentations. (pp. 30-31)

Multimedia gives students the opportunity not only to research the written word, but to employ graphic images and full-motion video in combination with text to create an integrated report. Students become much more involved in the decision-making process concerning both what they learn and how they organize and present what they have learned.

An example of such a program is *Science Essentials*. This fully interactive program allows students to access information from sixteen laserdisks, a video dictionary, a word processor, and a video editor.

In one module, students study the complex interplay of light and sound during a thunderstorm. The teacher calls up a storm sequence, which can then be stopped at key points while the students measure the amount of time between a thunderclap and a flash of light. In this way, they calculate whether the storm is approaching or receding, and at what rate and distance.

> *Science Essentials'* video dictionary provides visual and oral explanations for key concepts and terms. Students type in a word such as "erosion" and the video monitor displays a picture of a hillside being worn away by wind and water. Simultaneously, the computer screen presents a written definition, which is spoken aloud by a disc-based narrator. Students can cut and paste the video clips to assemble their own multimedia reports. (Stansberry 1993, p. 33)

The existence of a technology is guarantee neither of its ultimate use nor of its effectiveness. Although multimedia holds great potential, teachers will need to be willing to rethink their role along with their instructional strategies.

> Recent studies by Dr. Dennis Falk and Dr. Helen Carlson at the University of Minnesota suggest that the biggest roadblock to multimedia lies in the mundane observation that teachers tend to teach in the same way they themselves were taught.... [T]his underlies the necessity for teacher training in computers and multimedia. (Stansberry 1993, p. 36)

Many teachers and school districts are on the verge of making decisions to employ multimedia more extensively. Many new titles are currently available, prices on hardware have come down considerably, the types of equipment school districts are likely to purchase now are much easier to use, and there is much more staff development of high quality available to teachers. In such an environment it is likely that multimedia will begin to proliferate in public schools throughout the decade—provided teachers come to embrace it as an ally and not a threat or nuisance.

THE INTERNET AND NETWORKING

The Internet is truly a phenomenon. It has burst upon the scene and continues to grow and evolve rapidly and unpredictably. What the

Internet does demonstrate conclusively is the capability to create complex networks of computers exchanging a wide range of information, and the willingness and enthusiasm of people to learn how to use such a network, and to use it in unpredictable ways.

The Internet probably has two primary uses for schools: as a research tool and as a communication tool. As a research tool, it offers access to an unimaginably large amount of data from an incredible array of sources. It is easy to search, and reasonably fun to use, particularly when compared to older command-line interfaces dependent on obscure written commands.

As a communications tool, the Internet has the capability to allow students to converse with experts and novices on any of a wide range of topics. Through bulletin boards and file-transfer programs, students can quickly obtain advice and assistance from around the world. These communications can be interesting, entertaining, and informative. Students are drawn into the world of the Internet. Sometimes the challenge is to get them to rejoin the world outside it. E-mail, newsgroups, usenets, listservs are all mechanisms that speed and simplify communication among people who would find it nowhere near as easy to interact otherwise. Improving communication can spur greater learning.

In the long run, the Internet poses a unique challenge that goes far beyond these two uses. That challenge derives from the way in which the Internet promises to unlock access to information and, by implication, to learning. If virtually everyone has access to the Internet, if it becomes continuously easier to use, if the range of things that can be done on it continues to grow, and if schools don't become dramatically more technology-rich, we may be faced with a situation where children are exposed to so much information in the home and elsewhere in their lives that school becomes the place they go to get away from information.

This may seem preposterous on its face, and may be. However, it is worth asking the question now, since educators are not likely to hold the monopoly on certain types of information they have had previously. Home schooling, in particular, has gained momentum using rather unimaginative packaged curriculum programs. It's worth pondering how many more families may choose some degree of home schooling if they can gain easy access to relatively inexpensive, high-quality learning materials coupled with teacher interaction electronically over the Internet.

The Internet need not be the kind of threat to schools that it (or some other variation such as enhanced cable television) is likely to be to the Postal Service. At the same time, the handwriting is on the wall for all to see. Simply outfitting schools with computers does not give them any particular advantage over the home or any other site that would choose to establish an electronic hookup. The difference, or added value, schools can offer is in how they structure, support, facilitate, and certify student learning. Schools can be true "learning communities," not information factories. Education is more than acquiring information. Information is not knowledge, and knowledge is not wisdom. School should be about helping students at least learn the difference among the three, as well as begin their journey toward wisdom.

For schools to contribute a unique "value-added" to the learning process, technology cannot continue to be marginalized the way it is currently, nor can it be optional, nor can schools wait until there is "enough money" before they purchase technology. Many school teachers and administrators respond with the lament, "But we can't afford to," when they might more fruitfully determine if they can afford not to.

At the same time, the Internet is not likely to eliminate the need for teachers. It's hard to imagine large numbers of students sitting transfixed, day after day, year after year, in front of the computer doing school work. They may do so to "surf the Net," but these are activities where they are in control. Many of the current visions of an educational system revolutionized by technology fail to make a crucial distinction. They neglect to note that much of what motivates people to use technology as a learning tool is their ability to choose what they learn and control how they learn it. Schools tend to want learners to learn similar things in relatively similar ways. Who will control technology in the schools, the teachers or learners? Can both groups have their needs met simultaneously via technology-based learning? Or will computers end up much like videotape has, where it is used extensively in classrooms, but not necessarily in ways that excite and motivate students.

PROBLEMS FACING TECHNOLOGY IN THE SCHOOLS

Even if schools commit to using technology and designing learning accordingly, they face numerous hurdles. Clearly, technology is transforming the world and will continue to do so in rapid and unpredictable ways. But that is not the same as saying that technology is ready to transform education in its current form. The visionaries describe an educational future full of computers and self-directed learners creating and recording new endings to Shakespeare's plays or conducting research on groundwater pollution in India. While feasible (I'm sure somewhere students have used technology to do each of the aforementioned examples), the challenges schools face to reach this visionary state should not be overlooked. In other words, the simple existence of technology will not be enough to transform schooling. Here are several problems schools face:

Technology becomes obsolete so quickly that few, if any, school districts have devised a plan to keep pace with it. Most purchase machines and keep them until they wear out or run out of replacement parts. School districts' current strategy of choice to fund technology is the use of bonds, a dangerous approach. Morton (1996) describes the dangers:

> The new rush to use bond issues to fund computer systems in schools will cause new problems because administrators and school boards refuse to accept the idea that funding for computer systems (including teacher training, software upgrades, video upgrades, satellite use, and system maintenance) must be part of the annual budget and must be looked on as a necessary expense. Bond issues fund hardware and cabling, but nothing else....
>
> School budgets can accommodate technological change by using "technology-based budgeting." This is a simple concept: school budgets must have a minimum percentage of their total funds allocated to technology maintenance and change every year. This minimum is 3% of the total operating budget. (p. 419)

Computers are still not very easy to use or particularly reliable. By this I mean they "crash" often, lose or corrupt data with some regularity, have numerous incompatibilities between and among software and hardware, require highly specialized knowledge to keep in proper working order, and always seem to fail at crucial moments. Hardware and software makers do not help the situation much by rushing products to market before they are ready, then providing inadequate support to befuddled end users struggling to make them work. One has only to observe even a professional presenter making a presentation with an LCD panel and presentation software to see the number of things that can go wrong.

Equipment in schools is subjected to extreme abuse (or loving use) and is poorly supported, making it unreliable for anything other than rudimentary tasks. Schools where this is not true have individuals who have dedicated themselves to keeping machines in working order, updating software, and ensuring no damage has been done to them.

All of this limits the functional utility of technology. It can theoretically do many things, but in practice does not fully live up to what it promises. I think of today's computers and software as similar to cars that had to be hand-cranked to be started; every once in a while they would kick back and break the cranker's arm. It doesn't take too many bad experiences before users become "gun shy," and limit their use to a small slice of a machine's capabilities.

Computers require much more support than schools seem to be willing or able to provide for them. Business has learned the importance of LAN administrators and technical-support staff. Schools cannot provide such support (although high schools in particular are learning to use students to provide tech support). Once an organization develops dependency on computers and networks, it cannot tolerate disruptions to the network that last more than a few minutes. Schools (and the technology itself) have a long way to go before being able to meet such demanding reliability criteria. Weiss (1996) summarizes these support issues:

> Along with a hardware and software infrastructure, computer systems will require a number of parallel infrastructures in order to function at all. Skilled individuals will be needed to repair the machines when they break. And this repair includes more than the desktop machines out in the open; it also includes the array of networking devices hidden in closets. Other individuals will need to be available to diagnose systems in order to determine whether they need repair. Staff developers will be necessary both to train staff members in the use of computers and to model new teaching methods that can be integrated into the curriculum. A "help desk" system will be needed to answer users' questions over the telephone and to offer field support when necessary. Technicians will be required to install new equipment and transfer files as obsolete models are replaced. Specially trained network experts will be needed to solve problems arising beyond the individual workstations. New software and hardware will have to be tested for appropriateness and compatibility with the existing equipment. (p. 410)

The teacher-training requirements are almost beyond comprehension. Familiarity and competence with computers and their software are acquired almost entirely through "hands on" use. Users need support as they are learning and applying the software. Courses alone do not accomplish this. Schools will need extensive user-support networks and internal training capacity to have any hope of retaining currency if schools develop plans to avoid hardware and software obsolescence. Inability to standardize hardware within districts or even among districts will increase training costs as well.

The types of learning that networked computing (or good quality software for that matter) lends itself to are quite antithetical to the types of lessons teachers have become expert at constructing and conducting. At the very least, computer-based activities require much larger blocks of uninterrupted time than schools provide. Whether it's constructing a home page, manipulating an image in Photoshop, creating computer art, responding to email, producing an animated presentation, even playing an interesting simulation like SimCity, the time passes very quickly. Doing almost anything on computers other than typing term papers or responding to drill-and-practice programs demands this focused, yet relaxed, concentration for extended periods. As long as the student's entire day is tied up in classes, broken up into small bits of time from twenty to ninety minutes, the potential will not be realized.

Students want to use technology to learn what they want to learn, which may or may not be what the teacher has in mind. Students may spend hours of their own time learning everything there is to know about martial arts, or Nintendo games, or Walt Disney movies, or how to bake cookies, or the lyrics to every pop song produced in the past thirty years, or how to pass the SATs, but they may not necessarily be all that interested in nineteenth-century Czarist Russia, or factoring polynomials, or grammar, no matter what jazzy uses of technology are included. The challenge for educators is figuring out how to get students interested and engaged in learning about things they would not otherwise even know existed. The trick will be to find a way to balance and integrate student interests with teacher objectives within the complex web of information technologies.

On a more mundane level, many critical issues remain to be resolved before educators can expect to have access to the resources that will be available on the Internet and via other sources. Many sources of information have already been purchased by large corporations such as Microsoft, which have no plans to allow free access to their acquisitions. The Internet itself is still in its infancy, and there is no reason not to assume that it will become increasingly commercial as it evolves. Its early beginnings were as a government-sponsored network to support national defense, hence the free-access tradition.

Perhaps the Internet will escape the commercialization that befell the airwaves, but this is unlikely. When it happens, educators may lose free access or be restricted in their use of its resources. Copyright issues need to be resolved as well. What rights does an author have when a piece of work is accessed electronically? Why would publishers produce anything if it were readily available free online? Schools will need to confront the reality of students being limited in their ability to search the Internet (or other databases) due to commercial restrictions and monetary charges.

As long as learning is defined in terms of the Carnegie unit, technology will have a hard time becoming cost-effective. The Carnegie unit is a measure of student-teacher face-to-face contact. It is entirely inadequate as a measure in a technologically based system where interaction with the teacher may not be the key dimension of learning, and where a great deal of time may be spent outside the teacher's supervision. This learning time is not "homework" in the way schools have defined homework historically, as a sort of guided practice of materials introduced by the teacher. Instead, this independent work is the true essence of the learning experience in many cases. It is where the student creates, generates, and comprehends the "lessons." To say that the only time that should count is the time spent in the teacher's presence ignores this learning dynamic. Schools have been unable to rethink learning outside the Carnegie unit.

I do not wish to be excessively pessimistic here, but only to caution educators that the challenge of technology is multifaceted. It is not just a matter of getting the money to purchase computers. Schools will have to fight doggedly to maintain pace with the rest of the world, and will have to exert a voice in political arenas as well to influence the evolution of the information-based society so that schools have some special standing. This requires proactive planning and focus that I do not see presently in many schools or school districts.

I rarely sense urgency when talking with educators about the responses the information revolution demands from them and the challenges it poses to schooling. I find it hard to believe schools will be funded at the levels they are currently (however inadequate such funding might be) if they continue to drift out of touch with the rest of society's push into the information age.

ISSUES TO CONSIDER WHEN DEVELOPING TECHNOLOGY PLANS

The introduction of computers into schools has been viewed primarily as a hardware/software project. The ACOT study and my own work with schools suggest that the integration of technology requires attention to six variables simultaneously for any technology plan to have a significant educational impact. These variables are hardware, software, staff development, curriculum, instruction, and assessment. Unfortunately, most district technology plans focus on hardware acquisitions almost exclusively.

Schools that choose to buy rather than lease, or buy then resell, should have multiuse plans for the machines. What will the district do when the machines need memory or storage upgrades? What will be done when the machines begin to become obsolete? What are their projected key uses and their lifespan? Such questions need to precede, not follow, hardware purchase. How much support do the machines require and who will provide this support? How stable and reliable are they? How user friendly? How familiar?

Once hardware decisions are tentatively made, software needs should be considered immediately. Software includes a range of media including laser disks, CD-ROM discs, online resources, and, yes, books. It's worth reviewing at this point whether the right decision on hardware was made. Can you get the software you need at a reasonable price and with adequate technical support?

Staff development to support technology usage has been haphazard at best. While this is often true of the private sector as well, it offers little consolation to educators who face a newly equipped computer lab that has been stocked over the summer and readied for students only days before school begins, or who have the computer that was scheduled to be there in September show up mid-October and they are expected to learn how to use it over the weekend. Teachers need adequate time to learn and experiment with new software and hardware before they begin using equipment in the classroom with students. Technology acquisition programs often do not address this need in a systematic way.

There is little reason to purchase technology if the curriculum is not modified to take advantage of its unique potential. The purpose of technology is to enhance student learning; it is unlikely that this goal will be achieved if exactly the same curriculum is used after the technology is purchased as was used before the technology was available. The technology plan should contain an expectation that new curriculum will be developed and modified regularly based on the role technology can play in learning.

Similarly, the instructional techniques teachers employ in whole-class instruction are rarely well suited to the inherent potential of technology to personalize learning and let learners construct meaning. Helping teachers learn to move beyond their position at the front of the classroom and to develop new management techniques that allow students to work independently and in small groups while using technology as a learning tool will be essential if teachers are to integrate technology successfully. One out-of-control class that results from the failed use of technology will discourage many teachers from using technology for years to come.

New technologies, curricula, and instructional strategies imply new assessments as well. If the measurement of effectiveness for new technologies is limited to standardized achievement test scores, the ultimate uses of those technologies will be extremely limited. Assessment should be designed to capture the unique aspects of learning that occur when technology is integrated thoughtfully into instruction in ways that reshape learning. Such assessments might examine both what students learned and how they learned it. The process they followed will be as important as the results in many cases. In other cases, the only reasonable way to ascertain learning will be on the computer itself. Simulations are their own evaluation, for example.

LINKING TECHNOLOGY AND RESTRUCTURING

Sheingold (1991) discusses in detail the issues related to creating synergy between restructuring and technology. In particular, she identifies four recommendations to speed the process, which I have paraphrased as follows:

1. *Bring technology and learning to the same "table" when restructuring is being planned.* Make certain that those who purchase technology and those who design the learning experiences for which it is used communicate with one another.

2. *Reconsider how technology is organized in the district.* Who makes technology decisions, central office or teachers? What are the advantages of each? Should money for technology be spent on administrative uses of technology (student scheduling, information management), teacher networks and workstations, loaner machines so that teachers can learn technology at home, new multimedia technologies, or more classroom computers? Such issues must be considered in terms of the needs and goals of each school.

3. *Work toward a critical mass of equipment and expertise.* Once enough educators understand and implement a technology, they can model its use and provide technical assistance and training to those who want to develop proficiency. A critical mass is achieved, at least in part, by having machines that are easy for educators to access. Integrated-learning systems for which all lessons are programmed, for example, do not allow teachers to develop much proficiency with technology in a broad way, or to develop new uses for the computers.

4. *Use the media to convey new images and metaphors of schooling.* Technology should ultimately create schools that do not look or feel the way today's schools do. There will be little need for teachers to stand in front of quiet children seated in straight rows and tell students what to do and think. Small-group discussions revolving around data generated from a computer, student interviews and other projects using video equipment, or teacher-student evaluation of student electronic work may be more dominant images of the classroom.

Many long-awaited technologies are now available, and their price is falling. Schools are beginning to experiment with integrating these technologies into instruction. We are perhaps at the crossroads of our relationship with technology. Will it transform teaching, learning, and schooling, or will the "deep structure" (Tye 1987) of schooling overwhelm technology and make it conform to the current practices and goals of schooling (Levinson 1990, Mecklenburger 1990)?

Although there is still adequate time for schools to incorporate technology into learning and to redesign schooling for an information age, the time is passing without much tangible progress. The window of opportunity is closing as the gap between traditional schools and a technology-driven society widens. Educators face stiff challenges, but they may have little choice in the long run. Those schools that are struggling the most with technology are probably in the best position to make it work in the long run. Those that have few issues or problems associated with technology use may be in the most trouble.

CHAPTER 15

SCHOOL-COMMUNITY RELATIONS

This dimension of restructuring addresses the imperative for schools to work in close partnership with all their stakeholders, whoever has an interest in the education of students. These stakeholders include parents, community agencies, and businesses, among others. Healthy families require parents and children working toward common goals in a mutually supportive manner. Healthy communities need healthy families and healthy young people in order to survive. Businesses need people who have mastered basic academic skills, understand what it takes to be successful in the workplace, and want to succeed.

Schools play an important role in the health of all these institutions. And, conversely, these institutions have an effect on the school's ability to accomplish its primary mission. This interconnectedness is becoming increasingly evident, and educational programs are changing as a result, as are practices within families, agencies, and businesses. The net result is new ways of ensuring young people reach maturity emotionally whole, intellectually competent, and prepared for the world of work. These new partnerships represent a 180-degree shift in the thinking of some educators and in the structure of some schools.

During much of this century the relative separation between schools and their immediate communities has increased. While organized interest groups have certainly made their influence felt on public education, schools have not generally worked in concert with community agencies, businesses, local government agencies, or, in many cases, even parents, in a concerted fashion to adapt to the changing needs and realities of their constituents.

Many of the reforms during the first half of the twentieth century—such as nonpartisan boards of education, a professional managerial class composed of principals and superintendents, tenure and dismissal laws, formal processes for curriculum or book challenges, and the general bureaucratization of school procedures—served to insulate schools from community influence and to give them control over determining the ways and means by which community involvement took place. This separation fostered the perception that education was the responsibility of the educators, that they alone possessed the knowledge necessary to make the proper decisions regarding how schooling should be organized and conducted.

Over time, many educators themselves came to believe that they did, in fact, know best and could work successfully in relative isolation from their communities. Fewer teachers and administrators lived in the same communities or attendance areas as their students. More parents seemed willing to let the schools essentially raise their children, in part because the parents were stretched to the limit attempting to keep their households intact and economically viable. Local communities sometimes became complacent, assuming well-tended schools and periodic reassurances from educators indicated all was well. Business leaders did not view schools as partners or important contributors to their success.

Educators were swept up in this laissez-faire attitude and, indeed, fostered it. They tended to view desirable school-community relations as a process of telling parents what they needed to do and when they needed to do it, and of insisting the business community not become involved in education except to provide resources. Schools did not build relations with other social-service agencies who served the same students and families as the school (neither did these agencies mount much of an effort to collaborate with schools).

Epstein (1995) describes this state of affairs as the "external model" of overlapping spheres of influence. In this model, the family, school, and community may be drawn together or pushed apart. There are some practices that each unit conducts separately and some they conduct jointly to influence children's learning and development. The "internal model" of interaction, on the other hand, shows where and how interpersonal relations and patterns of influence occur. This model analyzes how these units interact at the level of the individual, with the student at the center of the model, and emphasizes the absolute interconnectedness of family, school, and community agency. This model is necessary, particularly in communities where parents and community agencies, for whatever reason, have not seen themselves as being in partnership with the schools.

This is not to say that there are no examples of schools that have long histories of open relationships with their communities. Parental involvement is and always has been a way of life at some schools. Other schools effectively bar parents from becoming involved. In either case, involvement drops precipitously at the middle-school level and is nearly nonexistent in the vast majority of high schools. Many schools do have active parent networks that raise funds (and, more recently, concerns) via site councils and other means of participation in policy- and decision-making. In most American schools, community involvement still translates primarily into volunteer work in primary classrooms; attendance at sporting events, musical programs, and other forms of entertainment; and contributions of money or resources for various school projects or programs. Business involvement is defined as equipment or supplies donations, guest lectures, or, occasionally, plant tours. Ties with social-service agencies may now be in place, but the results may be almost imperceptible.

New fiscal and demographic realities combined with rising calls for accountability are accelerating the need to change these traditional patterns of involvement. Numerous states have instituted requirements for more formal parental and community participation in decision-making.

School administrators are much more concerned with how they are perceived in the community, and they are coming to realize the gap that separates them from their communities. This new sensitivity becomes particularly evident whenever a district seeks to pass a tax measure. The proportion of families with children enrolled in public school is often less than a third, or even a quarter.

Most community members have little connection or communication with schools. Administrators find that business leaders do not understand or appreciate the challenges schools face, but at the same time the business community expects schools to improve dramatically before new funding is committed to them. Such realizations by school leaders have caused them to begin to rethink the relationship between schools and communities and to redefine the needs each can fulfill for the other.

A new relationship may be emerging. Although it may not necessarily be welcomed by all schools, it is one that appears to be necessary for schools to survive and adapt in the future. This new relationship entails both parent and community involvement in the schools. Furthermore, it also involves the movement of children into the community for portions of their education. This alteration of the school-community relationship will be difficult, both because of the attendant expectations that accompany such a readjustment and the strongly ingrained norms regarding parental roles and involvement in schools.

Three aspects of this new relationship are discussed here. One is the emerging role of the business community in shaping, directing, and determining the goals, methods, and content of the education of all youth. Many educators believe their central purpose should not be to prepare young people to be workers, yet the linkages between education and economic viability for individuals and nations become stronger and more compelling. Another issue is the need to integrate the work of schools with all the social agencies that provide services to young people so that these efforts lead to enhanced student success. Finally, the relationship between parents and schools is changing and being redefined.

THE ROLE AND EXPECTATIONS OF THE BUSINESS COMMUNITY

What does the business community expect from schools and how are corporate leaders beginning to redefine their view of education's role and goals? Four reports provide insight into these questions: the SCANS Report, the Workplace Basics report, an analysis conducted by the National Business Roundtable, and a series of recommendations from the California Business Roundtable. This section examines these documents and considers their potential impact on education. Two of the reports (SCANS and Workplace Basics) were discussed earlier, so are presented in summary form here.

The Secretary's Commission on Achieving Necessary Skills (SCANS) released its report in July 1991 (Harp 1991). The report, a systematic analysis of the skills employers say they need for many broad employment clusters, is one of the first documents to attempt to systematically identify the skills that will be needed by future workers.

The report concludes that "despite a decade of reform efforts, we can demonstrate little improvement in student achievement. One reason for the lack of educational improvement lies in the confusing signals exchanged between the education and business communities." Five competency areas designed to produce the "workplace know-how" needed by employers are identified in the report. The five competencies are defined as "the productive use of resources, interpersonal skills, information, systems, and technology, built on a foundation of basic and thinking skills and well-developed personal qualities" (Harp 1991). The report states that "real know-how cannot be taught in isolation; students need practice in the application of these skills." It also implies that teachers need to employ student portfolios and other performance-based-assessment strategies to ascertain "workplace know-how."

A second report, *Workplace Basics: The Skills Employers Want*, was produced jointly by the American Society of Training and Development and the U.S. Department of Labor's Employment and Training Administration (Carnevale, Gainer, and Meltzer 1990), based on interviews with employers throughout the nation. The report concludes that employers are looking for workers who have "learned how to learn," who have the ability to listen and communicate effectively; who have pride in themselves and their potential to be successful (self-esteem); who know how to get things done (goal-setting/motivation); who have some sense of the skills needed to perform well in the workplace (personal and career development); who can get along with customers, suppliers, or coworkers (interpersonal and negotiation skills); who have some sense of where the organization is headed and what they must do to make a contribution (organizational effectiveness); and who can assume responsibility and motivate coworkers when necessary (leadership) (Carnevale, Gainer, and Meltzer 1990, p. 8).

The National Business Roundtable, made up of the chief executive officers of 218 of the nation's largest corporations, has initiated a process to identify the gaps between what each state has done and what it plans to do to conform to the group's ambitious school-reform agenda, developed two years ago. This "gap analysis" has already been conducted for several states. The following nine areas are examined:

> High expectations for all students; outcome-based education; strong and complex assessments; rewards and penalties for schools; greater school-based decision making; an emphasis on staff development; establishment of high-quality prekindergarten programs; provision of adequate health and social services; and use of technology. (Weisman, November 20, 1991, p. 22)

A number of state business roundtables have developed policy recommendations for public education that go beyond recommendations for well-prepared workers. These reports offer models for effective school systems for all students, not just potential workers. In a concisely written summary of its proposal for school reform, the California Business Roundtable (Berman and others 1988) outlines the principles for a new education system, followed by six specific recommendations tied to the general principles:

Principles for a New Education System

- *Performance-based.* Students, teachers, administrators, schools, and districts should be evaluated according to their performance and held accountable for results.
- *School Autonomy.* Principals and teachers should have the authority and support to provide quality education attuned to community needs and characteristics.
- *Parental Choice and Flexible Alternatives.* Parents should be able to choose schools and schooling appropriate to their children, including small-school, flexible environments in which parents are actively involved.

- *Incentives and Innovation.* Teachers and administrators should have incentives for high performance, productivity, efficiency, and the use of modern technologies.
- *Professionalism.* Teaching should be an honored, respected, and well-paid profession in which teachers are compensated according to their ability, experience, and responsibility.
- *Pluralism.* The learning gap between poor minority and other children should be eliminated, and ethnic, linguistic, and cultural diversity should be treated as a strength.

The Recommendations

1. *Expand and focus schooling.*
    A. Establish primary schooling for all students.
    B. Focus and consolidate elementary and secondary education on core academics.
    C. Institute a post-10 student option of specialized education.
2. *Establish accountability based on performance and choice.*
    A. Set student performance goals, institute state-wide exit tests, and deregulate schooling.
    B. Strengthen school performance reports and intervene in failing schooling.
    C. Support parental choice of expanded school options.
3. *Establish school autonomy, and empower parents, teachers, principals.*
    A. Provide schools with discretionary budget funding and authority.
    B. Involve parents, community members, and teachers in school governance.
    C. Expand teacher responsibilities and promote team approaches to instructional management.
4. *Modernize instruction.*
    A. Redirect staff development to advance implementation of effective practices.
    B. Enable all schools to integrate technology into instruction and management.
    C. Promote adoption of flexible educational programs.
5. *Strengthen the teaching profession.*
    A. Establish multi-tiered teaching system with higher salary rates.
    B. Upgrade process of becoming a teacher.
    C. Assure continuing high professional standards.
6. *Capitalize on diversity.*
    A. Build school capacity to provide English language acquisition.
    B. Assure foreign language proficiency for all students.

> C. Establish critical and minority teacher shortage program. (Berman and others 1988, pp. 2-3)

These four reports are comprehensive in the breadth and depth of the changes they are suggesting. They present an analysis of how schools function, what is wrong with them, and how the system must be redesigned from the perspective of the business community. This is a striking departure from the notion that professional educators should be charged with solving the problems of education in isolation. The reports, and others like them, portray the belief that education is an integral dimension of a nation's well-being, not an activity to be valued primarily for its custodial and social-sorting functions, and that, by extension, the processes and outcomes of education are now, or should be, the concern of everyone, not just educators or parents.

Many of the points contained in these four documents have at least something in common with recommendations coming from educational reformers regarding changes that are needed in curriculum and instructional practices. The difficulty appears not to be so much at the level of general rhetoric, but at the level of specific curricular and instructional responses. It seems evident that the changes schools are contemplating under the banner of restructuring are unlikely to be sustained or institutionalized without support from the business community. It also appears that common ground exists for educators and business leaders to communicate, to explore areas of agreement and disagreement, and to educate one another during this period of intense examination of public educational practices.

Neither the business nor the education community knows exactly how to relate to the other, though awareness of the potentially symbiotic nature of the relationship is increasing (Amster and others 1990, Gordon 1990, Hurwitz 1987, Nancy 1989, Smith 1991). A survey by the National Association of Manufacturers (Weisman, December 11, 1991) indicates an awareness of the need for school-business partnerships but also reveals minimal collaboration.

> Up to 40 percent of the nation's manufacturing firms say their efforts to upgrade workplace technology and increase productivity have been stymied by the low level of education of their workforce, according to a new study by the National Association of Manufacturers.
>
> The study also found that most manufacturers believe the workplace must be more integrated into the schools through such programs as apprenticeships, job shadowing, and other methods of school-to-work transition. Nevertheless, it notes, only a handful of firms are participating in such projects.
>
> The report was based on a survey of 360 small, medium, and large manufacturing companies...

> The survey also found, however, that few manufacturing firms are responding to their problems by becoming involved in education. (p. 5)

Attempts are being made by some businesses to become more involved in education through a variety of programs and approaches. Although cooperative efforts between schools and private-sector organizations are not new, the upsurge of interest and activity in this area is being described by some as the "partnership movement" (Merenda 1989). Since 1983 the number of schools reporting that they were engaged in some form of partnership with a private-sector organization has increased from 17 to 40 percent (Heaviside and Farris 1989). The interest in partnerships expresses itself in a variety of types of programs and approaches. Merenda (1989) describes five levels of partnership, each closer to the classroom, that I have summarized as follows:

Level 1: Policy Partnerships. These are collaborative efforts among businesses, schools, and public officials to shape the policy debate regarding education, and to develop policy recommendations, including legislation, that address issues raised in this debate.*

Level 2: Partners in Systemic Educational Improvement. At this level, business people and educators work together to identify needed reforms and then work together over the long term to make those reforms happen jointly.

Level 3: Partners in Management. In this type of partnership business provides schools with support and expertise in specific areas of management, such as labor relations, personnel and incentive systems, purchasing processes, plant and equipment management, strategic planning, legal, finance, and tax issues, management-information systems, performance standards, productivity, public relations, or any of a wide range of possible areas. Executives on loan are one method by which such partnerships are enacted.

Level 4: Partners in Teacher Training and Development. Businesses involved in teacher and counselor training and professional development provide opportunities for educators to update, upgrade, or maintain skills, or to learn more about the labor market in the community. Activities might include summer internships that enable teachers to learn more about the business world, or specific courses for teachers in areas such as science and math.

Level 5: Partners in the Classroom. In these partnerships, volunteers from a business bring their expertise directly into the classroom, or bring the classroom to the business. Engineers might demonstrate design techniques to students, or serve as tutors and mentors.

The high level of interest in (and perhaps unrealistic expectations for) partnerships is illustrated by the response of national magazines that cater to the private sector, such as *Business Week*, which featured an issue with the headline: "Education: Can the Private Sector Save Our Schools?" The lead article, entitled "Saving Our Schools: With America's Classrooms Besieged on So Many Fronts, Here's How the Private Sector Can Help" (Segal and others 1992), described ways partnerships could be developed, paralleling those presented above by Merenda.

One example of a state business organization taking an active role to influence reform through a systemic approach can be found in Oregon. The Oregon Business Council (OBC), an organization comprising the forty-five largest nonpublic-sector employers in the state, has a multiyear involvement and investment in the state's education-reform efforts.

Rather than simply lending its support and hoping educators solve education's problems, OBC has taken a more activist approach. It has commissioned and issued a number of studies and white papers (see, for example, Conley 1993), as well as developed an action plan for restructuring K-12 education (Oregon Business Council 1996). The plan contains five key strategies that OBC believes will support educational restructuring by serving as the "leverage points for change that would have the highest, widest impact on schools." These strategies include the following:

- *High Standards*. Engage forcefully to ensure high standards for Oregon's Certificates of Initial and Advanced Mastery (CIM, CAM). Assemble hiring personnel from member companies to identify how to give value to the certificates in the hiring process.
- *School to Work*. Encourage member companies to become involved in school-to-work programs as a central element of education reform and to support the work-based requirements of the Certificate of Advanced Mastery.
- *Public Support*. Build public support and understanding of education reform by developing a public information campaign that emphasizes the importance of adopting high standards as the key component of education reform.
- *Systemic Change*. Encourage and support systemic change in education by engaging in high-level dialogue with educational leaders about business perceptions of the magnitude of change necessary in education, the urgency for such change, and the means by which to manage the process of systemic change.
- *OBC-Model School District Partnership*. Conduct an evaluation of the two-year partnership that has been in place between OBC and a local school district that has committed to move aggressively to implement

> systemic educational reform with the support of the business community. (paraphrased and summarized from p. 19)

Ahead lie many pitfalls to the development of new relationships between businesses and public education. Many business leaders—results-oriented people—are driven to distraction by the pace at which change in education is pursued, even in those schools identified as being on the leading edge of reform. They cannot comprehend the lack of a sense of urgency for change in most schools. Business people may become impatient when educators insist that they cannot be held responsible for producing a product, and that there is no equitable way to measure performance of teachers. Those in the private sector tend not to accept the argument of educators that little more can be done without additional resources; after all, most radical change in business occurs only after a company loses money. Financial rewards come as the result of a higher quality product, not in response to mediocre performance.

Business leaders' interest in education reform has remained relatively constant throughout the 1990s. In a national summit meeting of forty governors and forty-nine corporate executives and President Clinton on March 26-27, 1996, in Palisades, New York, all participants pledged to continue their commitment to a dramatically improved education system (Lawton 1996). The meeting was notable in at least two other ways: education was the only item on the agenda, and each governor was asked to bring a business leader (not an educator) to this meeting. Walsh (1995), in an article that indicated flagging business interest in reform, cited a survey that indicated the opposite trend was still present:

> In a recent survey, Business Week magazine found that education reform remained a top priority for corporate leaders. The survey of 408 senior executives at large corporations found that improving the U.S. education system ranked second only to balancing the federal budget as the issue "most important" to American business. (p. 11)

Many educators, for their part, tend to view "business" as a monolith, not making distinctions among large and small employers, progressive and conservative business people, or the corporate cultures present in every business. They are certain business people do not understand or appreciate the difficulties educators face attempting to teach the current generation of children without the resources they feel are minimally necessary. They believe that only they, the educators, are truly concerned about the development of the whole child. They believe the methods of business will not work in schools; businesses are places to secure resources and little else.

Another unresolved tension between business and education is the employment of school-age adolescents during the school year. The

United States is alone in the industrial world in allowing students to work, sometimes as many as forty hours a week, in addition to attending secondary school. It is difficult to determine exactly what proportion of high school students work, but best estimates are around 50 percent, with the percentage increasing at each grade level so that by graduation perhaps 80 percent of the students will have worked during their four years in high school.

These jobs are, for the most part, low-paying and dead-end. They are a means for young people to gain access to many of the rewards of a consumer economy. They can purchase and maintain vehicles, enjoy various forms of entertainment and food, and buy the clothes that they feel make the "right" statement about their status and social outlook. All of this comes at a price, however, and that price is usually time to pursue a demanding course of academic study.

> The typical teenage worker is not a poor youth, but a suburban high school student from a solidly middle-income, if not well-to-do, family. Contrary to popular stereotype, working students are not mainly poor youngsters who are working because their families need their earnings, but middle-class youth who are working for additional pocket money to spend on themselves. National surveys show that almost none of the typical student worker's earnings goes toward family expenses or into a college savings account. Most of it goes toward clothing, cars, stereo equipment, and socializing. In our study, for example, close to 60 percent of the workers we surveyed said they spent most or all of their earnings—on average between $200 and $300 monthly—on immediate personal expenses. Only about 10 percent said they saved most or all of their earnings for college, and only 3 percent said they gave most or all of their earnings to their family. (Steinberg 1996, pp. 167-68)

Steinberg found that working a few hours per week, perhaps less than ten, does not seem to have much consistent effect on student performance. As the hours worked per week increase, student achievement begins to decrease. Once students exceed twenty hours per week of work, the effect on learning can be pronounced. This is particularly troubling in light of the fact that about one-fifth of sophomores, one-third of juniors, and one-half of seniors exceed the twenty hour threshold.

The net effect of increased student presence in the workplace is simply to create a powerful competitor for students' time. Schools cannot assume students are capable of completing complex assignments or doing the kinds of reworking or editing necessary to develop analytic or writing skills. In fact, getting working students to do any homework at all can be trying for teachers, who find their students having difficulty simply keeping their eyes open. High schools may start as early as 7:30

a.m. to allow buses to be available for the later-starting middle and elementary schools. Teachers then encounter a student population of whom maybe one-third may have been working the day before, perhaps as late as midnight or 1 a.m. These young people are not the best candidates for rigorous academic engagement.

The problem is exacerbated in an economy that is becoming ever more based on retail sales and services. Such businesses need only low-skill, low-wage workers, often on a seasonal basis. This dependence means businesses come to resist changes in the length of the school day and in the traditional summer vacation They may even begin to object if a school district or state adopts academic standards that require students to spend significantly more time engaged in school work. This dependence on young low-wage workers who work part-time and do not receive benefits creates powerful forces to preserve the present system.

As was noted in earlier chapters, schools are developing school-to-work programs and career pathways and academies. They are doing this in partnership with local businesses, who are providing programs like internships and site visitations that involve young people in more productive work-related experiences and expose them to a wider range of possible jobs. Some businesses even discourage students from working during the school year. A very few are even considering examining high school transcripts of applicants to see how well they did in key courses. In states that are instituting "mastery certificates," a few businesses now examine a portfolio of student work samples or other evidence of skill and accomplishment.

Students who did well in key performance areas would be rewarded with employment, access to company training and development, and even to a higher starting salary. Such incentives might make a difference to students still in school if they were ever adopted widely. These companies remain the exception, however, at least for now. As a result, schools often see businesses as a threat to student learning rather than as partners for improved achievement.

Neither side finds it easy to view the world through the perspective of the other. At the same time, it appears as if the evolution of social and economic systems will force these two groups to reach much greater understanding of one another and to identify their true areas of common interest and potential mutual support.

COOPERATION WITH SOCIAL-SERVICE AGENCIES

In addition to developing a new relationship with the business community, educators, particularly those in urban areas or other settings with significant needs for social services, are strengthening their ties with social-service agencies. It is becoming increasingly clear that schools cannot cope on their own with the complex social and emotional needs more and more students bring with them to school. Guthrie and Guthrie (1991) summarize the current state of the services provided by social-service agencies:

> A wide assortment of social service agencies has been organized to serve children and youth at risk; but the services often overlap, agencies are compartmentalized, and children are incorrectly referred (Fantini and Sinclair 1985, Heath and McLaughlin 1989, Hodgkinson 1989, Kirst and McLaughlin 1989, Melaville and Blank 1991, Schorr 1988)....
>
> ... Now is the time to look at the full range of functions that schools are being asked to perform and identify which of those the school is best suited to handle, which can best be provided by other institutions and agencies, and which can best be accomplished by joint efforts. The challenge is not simply to divide up responsibilities, but to reconceptualize the role of the school and relationships among the school, the community, and the larger society. The new arrangement must be designed so that it shifts the emphasis of each agency away from itself and toward the client: the child. (p. 17)

There are many difficulties inherent in coordinating and integrating services between different public-service agencies to provide more comprehensive service delivery. The Education and Human Services Consortium, a group of twenty-two agencies that offer services to children, commissioned a detailed discussion of the strategies and structures for interagency collaboration (Melaville and Blank 1991). As a result of these discussions, the following elements were identified as essential to a comprehensive service-delivery program:

- Easy access to a wide array of prevention, treatment, and support services
- Techniques to ensure that appropriate services are received and adjusted to meet the changing needs of children and families
- A focus on the whole family
- Agency efforts to empower families within an atmosphere of mutual respect
- An emphasis on improved outcomes for children and families (p. 36)

Establishing collaborative interagency relationships is not easy. In fact, it's incredibly difficult. Most agencies are bureaucracies that have little or no incentive to alter their practices, coordinate with other bureaucracies, or share resources. In practice these behaviors might actually be punished, with reduced budgets or reduced authority for the agency. Policy-making bodies will need to create new rules that support or mandate cooperation and client-centered service provision. Otherwise, it is unlikely most agencies will put the energy necessary into solving the problems that inevitably develop when large, complex, bureaucratic organizations attempt to work together.

This is not to say that some well-meaning (or desperate) agencies are not already moving voluntarily in this direction. There is evidence to suggest that such discussions are beginning to occur voluntarily, particularly in large urban areas. Summarized below are Melaville and Blank's (1991) guidelines for those who undertake interagency planning designed to create client-centered service-delivery systems:

Involve all key players. This includes representatives from all levels of each organization, as well as the clients whose lives will be affected.

Choose a realistic strategy. Agreeing to coordinate existing services provides a good starting point. After cooperation is an established norm, true collaboration can develop. Small successes can breed larger successes.

Establish a shared vision. "Cooperative ventures are based on a recognition of shared clients. Collaborative partnerships must create a shared vision of better outcomes for the children and families they both serve" as the starting point for interaction (p. 37).

Agree to disagree in the process. Conflict is likely, particularly as the relationship among agencies moves from the realm of general principles to specific programs. Conflict-surfacing and resolution mechanisms need to be in place before major problems surface.

Make promises you can keep. Set attainable objectives, especially in the beginning, to create momentum and a sense of accomplishment. "At the same time, sufficiently ambitious long-term goals will ensure that momentum is maintained" (p. 37).

"Keep your eye on the prize." It is easy for collaborative initiatives to become bogged down in the difficulty of day-to-day operations and disagreements. It is important to refocus continually on the reasons for collaboration. Often someone outside of the direct-service community who is committed to the goals of the initiative and able to attract the attention of key players can help ensure that people remain focused on the original purposes of the partnership.

Build ownership at all levels. The commitment to the success of the project must extend to all levels of all agencies involved. Involve as many different people as possible in planning from the earliest moment possible, and keep all staff informed regularly. Cross-agency training can be particularly valuable to enable staff to learn new skills, communicate perceptions, and share information.

Avoid "red herrings." Partners should delay the resolution of the "technical difficulties" that impede the delivery of comprehensive services to shared clients until partners have developed a shared vision and assessed the degree to which problems are the result of statute versus operating procedures subject to internal control. Most problems result not from statutory limitations, but from current patterns of behavior that can be changed. Such patterns should not be allowed to sidetrack the project.

Institutionalize change. "If changes in programming, referral arrangements, co-location agreements, and other initiatives are to endure, both service delivery and system level efforts will need facilities, staff, and a continuing source of financial support. Participants must incorporate partnership objectives into their own institutional mandates and budgets and earmark" permanent resources to keep joint efforts going (p. 37).

Publicize your success. "Partnerships must demonstrate the ability to improve outcomes for children and families and express their success" in terms of dollars saved, current and future, and social benefit achieved. "Well-publicized results that consistently meet reasonable objectives will go far to attract the funding necessary to replicate and expand innovation" (p. 37).

Once partnerships are formed, there is still the matter of engaging the client with the service providers. Achieving this may require a reassessment of how best to reach clients. Social-service agencies and schools alike are realizing that clients do not come easily or willingly to environments they feel are hostile and alienating. Parents of many at-risk youth, in particular, have not necessarily had positive experiences with governmental institutions generally, and schools particularly. As a strategy to deal with this gap between home and school, the home visit is reemerging as a strategy to bridge the gap between institution and person, and to provide services where they are needed. This simple approach has proved highly effective.

Home visits are "one of the most promising vehicles we have" to make a positive impact on parents' and children's lives, according to Edward F. Zigler, the Sterling Professor of Psychology and the director of the Bush Center in Child Development and Social Policy at Yale University (cited in Cohen, October 16, 1991, p.24). Howard A. Davidson, the current chairman of the U.S. Advisory Board on Child Abuse, stated that home visits offer a "non-intrusive" way to support young families; they constitute "the best-studied prevention program in terms of its proven impact" (cited in Cohen).

Such strategies help overcome the advantage that middle-class families have when interacting with schools. These families tend to be more positively oriented toward schooling and to have had more positive experiences while in school. They are also more able to influence decisions and more likely to understand how the system operates. The parents of those who use social services have few of these advantages. Davies (1991a) describes the responsibility school people have to establish more opportunities for the voice of these parents to be heard:

> School administrators and teachers must take the initiative and reach out to "hard to reach" parents and to devise a wide variety of ways for them to participate. This means having appropriately prepared and sensitive school representatives go into homes to meet with families, having some meetings outside of the school in settings less intimidating and more accessible to many parents, using natural and informal settings to reach and talk with parents (churches, markets, social centers), preparing materials in other languages in the case of people whose English proficiency is weak, and scheduling activities that are attuned to the constituents being sought. But, the key point is that for many parents who are poor and from minority and immigrant groups, the initiative has to come from the school, and a diverse and persistent strategy is needed to break down barriers and establish trust. (p. 94)

For educators, accustomed to meeting parents at the school during times convenient to the educator, the idea of visiting parents at their homes at times most convenient for parents is a novel concept. Many schools that conduct home visits view them as more valuable than traditional parent-teacher conferences, because they are opportunities to break through some of the barriers between home and school. Such visits are already being employed by other social-service agencies, such as health and welfare programs, and it would seem to be possible to integrate educational services into home visits through careful interagency coordination and support in many areas. Home visits also help teachers to develop a better understanding of the needs of individual students by observing firsthand the environment in which the students live.

Not all home visits need be conducted by teachers. The Schools Reaching Out project, developed by the Institute for Responsive Education, helped sponsor the development of a "home visitor" program at Ellis School in Boston, one of its demonstration elementary schools (Davies 1991b). The program recruited and trained four women who were residents of the community and had experience in community work such as adult education, counseling, or the care and education of young children. These women were paid $10 an hour to visit four or five families. In all, the program reached about seventy-five families.

During these visits the home visitors provided information about school expectations, curriculum, rules, and requirements. They dispensed advice and materials to enable parents to support their children's schoolwork, and to encourage parents to read regularly to their children. They provided information on and referrals to other agencies that provided assistance in areas such as housing, health services, summer camps, and child rearing. They listened to the concerns of families regarding schooling and learned about their interests, then communicated this information to teachers. The home visitors discussed with teachers how to deal with parents' questions regarding homework and foster children's language development (Davies 1991b).

The goal of all these activities is to create schools where the needs of the student as client become the key force for the coordination of services offered by various agencies now operating in isolation from one another. The goal is not just to offer programs to those in need of support and assistance, but to ensure that clients are more successful members of society as a result of the programs and services offered. In this sense, all the agencies providing services to children will be judged in terms of outcomes (functional human beings), rather than processes (number and variety of programs), as was discussed earlier in the context of student learning.

NEW EXPECTATIONS FOR PARENTAL INVOLVEMENT

The relationship between parents and schools is evolving as well, as educators come to recognize the critical importance of active parental involvement if students are to achieve at higher levels. Epstein (1995) has studied families extensively in her role as codirector of the Center on Families, Communities, Schools, and Children's Learning and as codirector of the Schools, Family, and Community Partnership Program. She finds that schools can build successful partnerships with parents, and in fact must do so in many communities. Surveys and field studies involving parents, teachers, and students at all grade levels identify some important patterns relating to educator-parent partnerships:

- Partnerships tend to decline across grades *unless* schools and teachers work to develop and implement appropriate practices of partnership at each grade level.
- Affluent communities currently have more positive family involvement, on average, *unless* schools and teachers in economically distressed communities work to build positive partnerships with their students' families.
- Schools in more economically depressed communities make more contacts with families about the problems and difficulties their children are having, *unless* they work at developing balanced partnership programs that include contacts about positive accomplishments of students.

> - Single parents, parents who are employed outside the home, parents who live far from the school, and fathers are less involved, on average, at the school building, *unless* the school organizes opportunities for families to volunteer at various times and in various places to support the school and their children. (p. 703)

Epstein (1995) states further that researchers have also reached some more general conclusions about the perceptions of families and educators toward one another:

> - Just about all families care about their children, want them to succeed, and are eager to obtain better information from schools and communities so as to remain good partners in their children's education.
> - Just about all teachers and administrators would like to involve families, but many do not know how to go about building positive and productive programs and are consequently fearful about trying. This creates a "rhetoric rut," in which educators are stuck, expressing support for partnerships without taking any action.
> - Just about all students at all levels... want their families to be more knowledgeable partners about schooling and are willing to take active roles in assisting communications between home and school. However, students need much better information and guidance than most now receive about how their schools view partnerships and about how they can conduct important exchanges with their families about school activities, homework, and school decisions. (p. 703)

Epstein (1995) then presents a framework for six types of involvement that can form the basis of school-home partnerships. For each dimension she offers some sample practices and expected results for students, parents, and teachers that I summarize from her framework as follows:

TYPE 1: Parenting. Help all families establish home environments to support children as students.

SAMPLE PRACTICES: Parent education and other courses for parents; workshops on parenting; family support programs; home visits at transition from school to school, level to level.

RESULT FOR STUDENTS: Enhanced respect for parents; improved attendance; awareness of importance of school.

RESULT FOR PARENTS: Understanding of and confidence about parenting and adolescent development; awareness of own and others' challenges in parenting; feeling of support from school and other parents.

RESULT FOR TEACHERS: Understanding families' backgrounds, cultures, concerns, goals, needs, and views of their children; awareness of own skills to share information on child development.

TYPE 2: Communicating. Design effective forms of school-to-home and home-to-school communications about school programs and children's progress.

SAMPLE PRACTICES: Yearly parent conference; monthly folder of student work sent home; student-led conferences; regular schedule of upcoming events; clear information for choosing courses, programs, activities.

RESULT FOR STUDENTS: Awareness of own progress and of actions needed to maintain or improve grades; informed decisions about courses; understanding of school policies.

RESULT FOR PARENTS: Understanding school policies and programs; monitoring and being aware of child's progress; responding effectively to students' problems; interacting more with educators.

RESULT FOR TEACHERS: Increased communication with families and awareness of own ability to communicate clearly; appreciation for uses of parent communication network; increased ability to understand family views on children's progress.

TYPE 3: Volunteering. Recruit and organize parent help and support.

SAMPLE PRACTICES: Parent room for volunteers; annual postcard survey to identify parent talents, interests; phone trees; parent patrols to aid school safety.

RESULT FOR STUDENTS: Skill in communicating with adults; awareness of many skills, talents, occupations, and contributions of parents and other volunteers.

RESULT FOR PARENTS: Understanding teacher's job, increased comfort in school; self-confidence about ability to work with children at home.

RESULT FOR TEACHERS: Readiness to involve families in new ways, including those who do not volunteer at school; awareness of parent talents and interests; more time to attend to individual students as volunteers supervise some other students.

TYPE 4: Learning at Home. Provide information and ideas to families about how to help students at home with homework and other curriculum-related activities, decisions, and planning.

SAMPLE PRACTICES: Information for families on skills required in all subjects at each grade; information on homework policy and expectations; information on how to assist students in developing particular skills; summer learning packets.

RESULT FOR STUDENTS: Gains in skills, abilities, and test scores linked to homework and classwork; homework completion; positive attitude toward schoolwork; view of parent as more similar to teacher and of home as more similar to school.

RESULT FOR PARENTS: Know how to support, encourage, and help student at home; understanding of instructional program and of what child is learning; appreciation of teaching skills; awareness of child as learner.

RESULT FOR TEACHERS: Better design of homework assignments; respect of family time; recognition of all types of family structures, single-family, dual-parent, extended, etc.; satisfaction with parent involvement.

TYPE 5: Decision-Making. Include parents in school decisions, developing parent leaders and representatives.

SAMPLE PRACTICES: Active PTA/PTO, advisory councils as ways to develop parent participation and leaders; independent advocacy group to work on school reform and improvement; information on school board elections; network to link families with parent representatives.

RESULT FOR STUDENTS: Awareness of representation of families in school decisions; understanding that student rights are protected.

RESULT FOR PARENTS: Input into policies that affect child's education; feeling of ownership in school; shared experiences and connections with other families; awareness of school, district, and state policies.

RESULT FOR TEACHERS: Awareness of parent perspectives as factor in policy development and decisions; view of equal status of family representatives on committees and in leadership roles.

TYPE 6: Collaborating with the Community. Identify and integrate resources and services from the community to strengthen school programs, family practices, and student learning and development.

SAMPLE PRACTICES: Information for families on community health, cultural, recreational, social-support services; service integration through partnerships with civic, counseling, cultural, health, recreational, and other organizations and businesses; service to the community by students.

RESULT FOR STUDENTS: Increased skills and talents through enriched curricular and extracurricular experiences; awareness of careers and of options for future education and work; specific benefits linked to programs, resources, and opportunities.

RESULT FOR PARENTS: Knowledge and use of local resources by family and child to increase skills and talents or to obtain needed services; interactions with other families in community activities; awareness of school's role in the community.

RESULT FOR TEACHERS: Awareness of community resources to enrich curriculum and instruction; openness to and skill in using mentors, business partners, community, and others to assist students and augment teaching practices; knowledgeable, helpful referrals of children and families to needed services. (pp. 704-06)

Many examples exist of schools or districts that have attempted to increase parent and community involvement along Epstein's six dimensions. In Chicago, extensive parent partnerships were mandated by a 1988 school-reform law. School councils were to be elected and have considerable influence in the city's 553 schools. Daniels (1996) reports that after eight years "we're happy to report that parent involvement works."

Workshops prepare parents to be involved in decisions regarding curriculum and other aspects of the school. The Parent Project (Vopat 1994) employs weekly workshops to immerse parents in the same types of lessons that teachers are using in the classroom. Each workshop is cotaught by a teacher and parent and focuses on the needs of the school. One workshop, for example, prepares parents to be docents to escort small groups of students through a prairie site used by the school for various student-research projects. Parents are engaged directly in other ways, such as family-history projects that require child and parent to discuss the family's origins. From this framework, students learn about a variety of subjects related to their family's history. One school invited parents to come to school with family snapshots for a celebration that was used as the basis for a family-literacy program.

Davies (1991b) suggests there may be three common themes present in the new programs for parent involvement being put forth by many different scholars and researchers, including Comer, Levin, Epstein, Rich, Seeley, Zigler, Kagan, Weiss, and Cochran. These three common themes are as follows:

> 1. *Providing success for all children.* All children can learn and can achieve school success. None should be labeled as likely failures because of the social, economic, or racial characteristics of their families or communities.
> 2. *Serving the whole child.* Social, emotional, physical, and academic growth and development are inextricably linked. To foster cognitive and academic development, all other facets of development must also be addressed by schools, by families, and by other institutions that affect the child.
> 3. *Sharing responsibility.* The social, emotional, physical, and academic development of the child is a shared and overlapping responsibility of the school, the family, and other community agencies and institutions. In order to promote the social and academic development of children, the key institutions must change their practices and their relationships with one another. (p. 377)

There is considerable evidence that as this involvement increases, so does student success (Henderson 1987, Mortimore and Sammons 1987). Parental involvement comes to be much more than bake sales and

PTA meetings. Parents can be effective partners only when they know what is happening in schools, know what is expected of them, and know how to provide the requested support. In return, schools can expect to be more willing to listen to parents' concerns and to involve them in decisions about their children's educational program.

Many school districts are engaged in attempts to redefine the role of parents. Chrispeels (1991) describes the rationale for and development of policies in San Diego that seek to enhance parental involvement, with particular attention to the needs of those not typically involved in education:

> In many instances, however, administrators' and teachers' low expectations for and negative attitudes toward low-income or non-English-speaking children and their parents have prevented the development and implementation of well-designed programs [of parental involvement]....
>
> In early 1988 the [San Diego City Schools] established a task force to explore ways in which parent involvement could be strengthened in the district.... The policy.... [developed by the task force] outlines a multifaceted definition of parent involvement. The board [of education] commits itself to:
>
> - involve parents as partners in school governance, including shared decision making and advisory functions;
> - establish effective two-way communication with all parents, respecting the diversity and differing needs of families;
> - develop strategies and programmatic structures at schools to enable parents to participate actively in their children's education;
> - provide support and coordination for school staff and parents to implement and sustain appropriate parent involvement from kindergarten through grade 12; and
> - use schools to connect students and families with community resources that provide educational enrichment and support. (pp. 368-69)

The San Diego model for comprehensive school-based student services, dubbed "New Beginnings," has not been without its problems (Stone 1995). Although the idea of providing all the services students need and to which they are entitled at one site seems eminently sensible, achieving this goal has proved challenging. Demonstration programs have been perceived as "top-down" and the superintendent's "pet" project. Agency and education-system heads have been able to agree in principle, but front-line workers in the agencies and schools have had a more difficult time learning to work together. Teachers have not necessarily found the social-service workers to be of help, since privacy laws prohibit the transmission of information back to teachers after they make referrals.

The San Diego school districts' personnel, such as counselors, have been pressed into service to support the interagency links, and as a result they are less available to teachers. Social-service agencies have a history of viewing families as "dependents" rather than "resources" or active participants in decision-making.

Stone concludes that in spite of these issues, San Diego's effort "remains a ground-breaking effort to bring coherence to a fragmented human service system. This... illustrates the need for top-level planning but suggests a parallel need for effective cooperation at other levels" (p. 795).

Dryfoos (1996) describes collaborative efforts to meet student needs at one site as "full-service schools," a term first used in legislation passed in Florida in the early 1990s. This term refers to

> one-stop centers where the educational, physical, psychological, and social requirements of students and their families are addressed in a rational, holistic fashion. (p. 18)

Full-service schools seek to provide both a quality education and needed support services. The school district is responsible for revitalizing the school by using techniques and strategies demonstrated to be successful in transforming schools so that students receive the instruction and curriculum necessary to succeed in further schooling and in society upon the completion of their education. Other governmental agencies provide health, welfare, recreation, and life-enhancing programs in various combinations.

Successful full-service schools generally have principals who are advocates of this strategy, who champion the problem-solving and turf issues that accompany a program that spans bureaucratic boundaries. The schools also have full-time coordinators or directors who help integrate the services, and, more importantly, build understanding and support among all personnel so that each staff member understands what the others can and cannot be expected to do. A designated physical space is important to create a focal point for the services and programs present in the building and to offer community members a point of entry into all programs.

Full-service schools face numerous obstacles, including turf issues, clashes over governance structures and the authority of different labor groups and applicable contracts. Lack of continuity when superintendents, principals, teachers, program directors, and social-service staff come and go with some frequency; and, finally, controversy over establishing such programs in the first place. Controversy can often plague programs that propose to provide family planning, extensive health care, legal aid, substance-abuse treatment, welfare case management, and other services some would like kept as far away from schools as possible.

As might be expected, these programs cost more to run than regular schools. A school-based clinic costs about $100 per student user per year, while more complex services might raise the cost to $1,000 per user. The movement by federal and state governments toward block grants may create a potential source of funds for these cross-categorical services that now must be funded from an array of budgets and agencies.

ACCELERATED SCHOOLS

Family involvement is particularly beneficial in schools serving low-income populations. The Accelerated Schools program, developed by Henry Levin of Stanford University (Chenowith 1991; Rothman, October 30, 1991), emphasizes parent involvement as crucial to improved student performance. Webster Elementary School, in San Francisco, has been cited previously as a school that implemented the Accelerated Schools approach. The school sought to make parents feel welcome, to help them work toward high school equivalency diplomas, and even to hire some parents as paraprofessionals. Enhanced communication between home and school helped reduce student discipline problems (Rothman, October 30, 1991; Seeley 1989).

The philosophy of the Accelerated Schools is counter to the trend in American society of delegating functions to government that has prevailed over the past 150 years. Services such as fire, police, sanitation, public health, welfare, and child care have all come to be responsibilities of government, not of individuals or groups of citizens. In this "delegation model" (Seeley 1989), citizens fulfill their responsibility by paying taxes. Political office-holders and paid officials are then held accountable. This model may work well enough in other areas, such as police and fire protection, provided the community is supportive and engages in preventative behaviors. However, in education the model has serious flaws:

> Over the years, the model has become institutionalized in the roles, relationships, and mind-sets not only of school staffs but of parents, students, and citizens as well. As a result, efforts by school leaders to involve parents frequently meet with resistance. Parents often signal, subconsciously or overtly, that they don't have to be involved because the job has been delegated to the schools, just as they don't have to be involved in putting out fires once the fire department has been given that job. Schools staffs, for their part, often do not see parent involvement as part of their professional role and, indeed, can quite justifiably see it as an interference with the jobs that have been delegated to them. (Seeley 1989, p. 46)

The Accelerated Schools program seeks to counteract this model by establishing the principle that parental involvement is essential to the success of the school. Parental involvement is a necessity, not a luxury. It is not the specific activities that are the key to achieving this goal as much as the ability of the staff and parents to create what they jointly see as a collaborative community-learning center.

Furthermore, these schools encourage another effective parental strategy—"working the system." Parents whose children do well typically have success in mobilizing the school on their children's behalf. They make it clear that they see the role of the school as helping to serve their children, and do not assume they can solve all educational problems themselves. The Accelerated Schools model helps more parents learn how to shape education to meet their children's needs. It allows parents to be "insiders" rather than "outsiders."

THE CHALLENGES AND REWARDS OF PARENTAL INVOLVEMENT

Parental involvement can be a two-edged sword. In some communities groups of parents may have strong feelings on particular issues. Schools may have prevented these groups from influencing decisions such as textbook selection or curriculum. However, with the advent of more decentralized decision-making, parent and community groups have both an entry point and a legitimate forum in which to raise their concerns. Schools do not tolerate organized pressure well, and they are ill-equipped to withstand conflict, overt challenges to the authority of teachers, or controversial issues for very long.

Sometimes these challenges are crucial stimuli to true school improvement, such as when parents demand access to schoolwide student-performance data and knowledge of what the school is going to do to improve student performance. At the same time, parental involvement can just as easily lead to the promotion of a particular agenda or world view that may be incompatible with the rest of the school's instructional program.

But parental engagement has been shown repeatedly to be closely related to student learning and success. Most educators acknowledge this, particularly when they fail to achieve success with a group of students. Lack of parental support is frequently invoked as an explanation or a lament when schools are asked to confront poor student performance. Schools have a stake in making parent involvement a reality. Steinberg (1996) found that involvement worked in two separate sets of circumstances:

> Because we studied children and their parents over time, we were able to separate out cause and effect in looking at parental involvement and school

> performance. This was important to do, because it is very likely that, when students do well in school, this inspires their parents to become more involved in their child's education. But while this turns out to be correct, the reverse is also true: being an involved parent actually *leads to* student success. For example, if we saw two students with equal grades in school at one time and followed them over the course of the next year, we would find that the student whose parents were more involved in his or her education would earn better grades over time than the student whose parents were less involved. (p. 125)

Schools can help parents do a better job without taking over responsibility for rearing the child. But schools will need to be aware of the dynamics of parenting and be able to understand differing parenting styles if schools are to assist parents in becoming more effective partners. Steinberg (1996), who studied parenting styles extensively and systematically, states:

> We now know that there are three fundamental dimensions of parenting that differentiate good parents from bad ones, and accordingly, that differentiate the home environments of children who are successful in school from those who are not: *acceptance versus rejection, firmness versus leniency*, and *autonomy versus control*. Psychologists conceive of each of the three dimensions (acceptance, firmness, and autonomy) as a continuum along which parents vary (e.g., from extremely accepting to extremely rejecting, or from very firm to very lenient). Most parents fall somewhere between the two extremes of each range.
>
> Acceptance refers to the degree to which the child feels loved, valued, and supported by his or her parents. Accepting parents are affectionate, liberal in their praise, involved in their child's live, and responsive to their child's emotional needs....
>
> [A]t the other end of the acceptance continuum are parents who are cold—either actively by rejecting, or passively aloof. These parents do not express much love for their child and are unresponsive to the child's emotional needs....
>
> Firmness refers to the degree and consistency of parental limits on the child's behavior. Parents who are high on this dimension have clearly articulated the rules that the child is expected to follow, and they make demands on the child to behave in a mature and responsible fashion....
>
> Lenient parents, who have few rules or standards for their child's behavior or who have rules but enforce them lackadaisically or inconsistently, fall at the other end of the firmness continuum. Some parents who are low in firmness are deliberately permissive.... Other parents... are lenient not for philosophical reasons, but more from an inability to be firm and to exercise their authority....
>
> Autonomy... refers to how much parents tolerate and encourage their child's sense of individuality. Parents who are high in support for psycho-

> logical autonomy solicit their child's opinions, encourage their child to express himself or herself, and, in adolescence, enjoy watching their child develop into a separate and autonomous individual....
>
> Since the late 1950s, literally hundreds of studies have been conducted that examine acceptance, firmness, and autonomy support and their consequences for the child's development. The gist of these studies has been remarkably consistent: children develop in more healthy ways when their parents are relatively more accepting, relatively firmer, and relatively more supportive of the child's developing sense of autonomy. (pp. 106-08)

Studies have found further patterns in the way parents raise their children. These patterns can be categorized into three major groups: authoritarian, permissive, and authoritative. Of the three, the authoritative style seems to be the most effective. These parents are not as concerned with obedience as with responsibility. They want their child to be self-reliant and personally responsible, accepting the consequences of her or his actions. For parents who employ this style, their primary concern is not that the child be either obedient or happy, but that the child's judgment matures in a healthy fashion, guided and nurtured by the parents, who model appropriate behaviors and strategies.

These three parenting styles describe perhaps 70 percent of all families. However, a significant minority of families do not fall into any of the categories. Steinberg found that

> Many of these parents combined the "worst of both worlds," sharing emotional aloofness with the authoritarian families and disciplinary leniency with the permissive ones. These parents seemed remarkably uninvolved in their children's lives—either as sources of social support or as providers of guidance or structure. We termed these parents "disengaged"....
>
> It is hard to estimate the number of truly disengaged parents, but it appears to be somewhere around 25 percent. (Steinberg, p. 118)

These parents and families pose severe challenges to schools, which sometimes simply operate as if all children came from the best and most supportive family backgrounds and seem to ignore the reality that many of their students do not. Even if they do not ignore it, schools may make few modifications to accommodate the issues that arise when parent, student, and teacher are not operating from the same set of assumptions. The results can be devastating:

> Compared with students whose parents are involved in their schooling, youngsters with relatively more disengaged parents earn lower grades in school, are less committed to school, and are less motivated to do well in the classroom. That nearly one in three parents is disengaged from their adolescent's life is clear reason to worry about the future well-being of America's young people. (Steinberg, p. 121)

Schools are just beginning to learn how to establish the mechanisms, traditions, and norms that can facilitate community involvement and linkages. Once everyone is more certain about the ground rules for involvement, the process can work effectively. Schools that move proactively to create credibility with their communities, to be open and responsive, to develop appropriate structures for community involvement and linkage, and to do so before a crisis exists, will create a reservoir of trust that can be tapped in times of potential controversy or conflict. Such trust will be more important as schools come to depend on their communities and interact with them in more substantial ways.

A closer, more open relationship with the communities in which schools are embedded appears to be essential, inevitable, and potentially quite desirable. This changing relationship will have a strong impact on schools, many of which continue to see themselves as insulated islands. Schools that view partnerships as opportunities rather than threats will be able to capitalize on additional resources and to redefine relationships in ways that reaffirm the school's role as the center of the community and that enable the school to fulfill its primary mission, that of enabling all students to reach high levels of intellectual and social functioning.

CHAPTER 16

TEACHING AND LEARNING TIME

Many educators are frustrated with the way time limits their ability to adapt learning experiences to the needs and abilities of students. The urge to redefine the temporal limits imposed on education is often particularly strong in high schools, where the multiple-period day arbitrarily divides learning into several blocks of time, each about fifty minutes long. Most schemes for restructuring teaching and learning time focus on reducing the number of daily preparations for teachers and the number of students with whom teachers must interact.

Discussions of the structure and allocation of time in education have two foci: how time is structured to facilitate teaching and learning; and how time can be organized or acquired to allow educators to rethink and redesign schools, and to attain the skills necessary to make such schools successful. This chapter discusses the first focal point, the structure of teaching and learning time. The discussion of time for adults to develop and implement new models of schooling is contained in part 4.

WHY ALTER TIME?

The organization of the school day into separate periods of time devoted to separate areas of study is so familiar to most people that anyone who went through school in the past fifty years assumes it has always been this way. This illustrates how quickly a practice can become so institutionalized that everyone forgets it is only one way of doing things.

Learning can and does occur in many different temporal frameworks. It tends to be nonlinear and episodic. "Teachable moments" can occur at the most unexpected times. Long periods can pass when no learning seems to be taking place. No one structure of time guarantees learning will take place.

However, educators can attempt to create a relationship among what they are attempting to achieve with students, their learning goals, and the ways they organize time to achieve the goals. For example, if the material to be taught is essentially an endless stream of content with no real need to divide the learning into pieces, almost any structure for time will do. Today's model of short periods of time each day is suited quite nicely to such goals.

On the other hand, if the goal is student understanding of broad overarching concepts and "big ideas," or if students are expected to create high-quality products, or if they are to work together on complex problems, or if they are to think and analyze, then the current structure of learning time will not be well suited to those goals.

For schools that are not making changes in the Central Variables of standards, curriculum, instruction, and assessment, many different schedules will work. For those schools that have chosen to redefine learning goals, content, and teaching methods, a change in scheduling becomes mandatory after a certain point. The learning experiences simply will not confine themselves to the time allotted.

A change in the structure of the schedule can create tensions within a school, since it is the type of change that affects all staff, regardless of their commitment to new ways of teaching.

Canady and Rettig (1995) point out that changing schedules to meet the needs of the educational program can result in a series of benefits:

- More effective use of time, space, and resources, both physical and human
- Improved school climate as students focus more on learning and are less stressed by the demands of constant changes in learning activities, environments, and instructors
- Use of many instructional strategies not previously employed due to time constraints (for example, project-centered learning)
- A wider range of programs and student groupings (for example, students with special needs can be accommodated and supported in more ways)

O'Neil (1995a) reviewed a variety of scheduling models, focusing mainly on block schedules, and concluded that "in general, research has found that teachers and students like longer classes, and that students do at least as well on measures of academic achievement" (p. 15).

REDESIGNING TIME IN SECONDARY SCHOOLS

More change in schedules is occurring in secondary schools than in elementary. Most elementary teachers already have some control over how they allocate time, within broad margins, thereby lessening the need to redesign schedules in elementary schools. With the rise of "specials"—teachers of art, music, and physical education and the proliferation of pullout programs such as Title I, resource rooms, and talented and gifted—even elementary schools must give much more thought to their schedules. But it is in middle and high schools that the greatest change is taking place.

In fact, schedule changes in secondary schools may be the most ubiquitous manifestation of school reform to date. Many schools have moved away from the traditional "7x5" or "6x5" schedule where seven or six classes meet for something less than an hour each day of the week, generally for one or two eighteen-week semesters. This configuration, driven almost entirely by the time requirements of the Carnegie unit, has been the most common model in American high schools most of this century, with periodic digressions to explore alternatives such as modular scheduling. Once again, secondary schools are considering alternatives. This time they are doing so to accommodate changing educational goals, student populations, curricular content, and instructional techniques. The goal is not to provide students more choices, as was the goal of modular scheduling, but to ensure greater student engagement and mastery of the curriculum.

An example of an innovative model for reconfiguring time in ways that offer the potential for changes in curriculum and instruction is the Copernican Plan (Carroll 1990). Designed for use at the high school level, this plan centers around the idea of "macroclasses" of differing possible lengths, from 70 to 226 minutes. It emphasizes the integration of subject matter through seminars. The curriculum would become less fragmented, since students would take fewer courses at any given time. Teachers would teach fewer classes each day, thereby reducing the number of students they see each day. One goal is to improve students' sense of belonging and to increase teachers' ability to meet students' individual needs. These benefits in turn can lead to greater student success and increased motivation.

Carroll identifies some of the benefits of restructuring time in American high schools:

> Virtually every high school in the U.S. can reduce its average class size by 20%; increase the number of courses or sections it offers by 20%; reduce the total number of students with whom a teacher works each day by 60% to 80%; provide students with regularly scheduled seminars dealing with complex issues; establish a flexible, productive instructional environment that fosters effective mastery learning, as well as other practices recommended by research; get students to master 25% to 30% more information beyond what they learn in the seminars; and do all of this more or less within present levels of funding.

> How? By redeploying its staff members and students so that teachers can concentrate on teaching students rather than on "covering" classes....
>
> ... The Copernican Plan proposes two alternative schedules. In the first, students enroll in *only one* four-hour class each day for a period of 30 days. (Each student would enroll in six of these classes each year, which fulfills the required 180 day school days.) In the second alternative, students enroll in *two* two-hour classes at a time for 60 days. (Each student would enroll in three of these two-course trimesters each year.) A school could schedule both 30-day and 60-day courses simultaneously, and the length of these large-block macroclasses could vary....
>
> ... The increased efficiency of the Copernican Plan frees a block of time in the afternoons that allows the Copernican high school to offer seminars that help students integrate knowledge across traditional disciplinary lines....
>
> ... A common response to the proposed schedules is that students cannot survive a two-hour lecture, much less a four-hour one. And the prevalence of that response is a major reason why the Copernican Plan is needed. Overuse of lecturing is a major problem of high school instruction. The Copernican Plan establishes conditions that foster the use of a variety of instructional approaches that are more personalized and more effective, and it stresses the importance of providing adequate support for staff members to develop these approaches....
>
> ... Under the Copernican Plan, a teacher prepares for and teaches only one or two classes at a time. Furthermore, average class size can be reduced by about 20%. This reduction in class size is made possible because teachers traditionally teach five classes for the full school year. Under the Copernican Plan, each teacher teaches *six* classes a year, thereby increasing the number of classes offered by 20%.
>
> ... However, the key advantage of the Copernican Plan, whatever the size of the class, is that the teacher deals with only a small number of students at one time and prepares for only one (or two) classes at a time. Even with *two* two-hour classes for 60 days, a teacher's daily student load drops more than 60%. The time classroom teachers typically spend preparing for five classes can be spent on planning for small groups or even for individual students within a single class. (pp. 358-62)

The Masconomet Regional High School in Boxford, Massachusetts, began to implement the first pilot Copernican model in 1989 (Carroll 1994). They named it the Renaissance Plan. Students could choose to participate. Since many of the changes created by this pilot were potentially controversial, a committee comprising both supporters and critics of the plan was convened to develop an evaluation design. A team from Harvard University conducted the evaluation using questionnaires and other methods. They sought answers to five questions, listed below with the evaluators' findings:

1. *Will the students be able to function effectively in long "macroclasses" of about two hours?* Finding: Students are very flexible in adapting to

> classes of differing lengths. Renaissance students preferred the longer classes. The quality of interpersonal relationship student to teacher and student to student was improved markedly.
>
> 2. *Will the teachers find the intensity of teaching classes for roughly two hours draining?* Finding: The teachers felt rejuvenated and believed they were teaching more productively than ever. They felt invited to rethink their pedagogical styles.
> 3. *Will the students learn as much as they would under the traditional system?* Finding: Students performed comparably on midterm and final examinations even though students in the program started at a lower academic level than those in the traditional program and had significantly fewer hours of class.
> 4. *Will the students retain as much of what they learn?* Finding: No consistent significant difference was found that favored students in one program over the other, even though Renaissance students might have had a nine-month gap since they had learned materials.
> 5. *Will there be as much in-depth instruction in the Renaissance as in the traditional program?* Finding: Oral exams designed to assess student capacity for problem solving and group work showed that Renaissance students performed significantly better than students in the traditional program. (Carroll 1994, pp. 108-9)

To test the effectiveness of the Copernican Plan further, seven other schools that had implemented versions of the schedule were evaluated. Although the fidelity of implementation varied among the schools, the evaluation results were relatively consistent. Findings included the following:

> Impact on student conduct:
>
> - Effects on attendance were not strong, but were positive. Four schools showed improvements, two showed declines and one showed no change.
> - Four of five schools that were able to provide suspension data showed reductions in the rate of suspension. One school showed a small increase. Two schools without baseline data indicated improved conduct under the new schedule.
> - Six of seven schools reported reductions in dropout rates ranging from 17% to 63%. The median change for the seven schools was a 36% reduction.
>
> Impact on academic performance:
>
> - Students increased their academic mastery (improved GPA and increased number of courses completed) at a median rate of 18%. The two schools for which appropriate standardized testing data were available showed solid gains. (Carroll 1994; pp. 111-12)

Wasson High School, in Colorado Springs, Colorado, developed another strategy for restructuring time within the school day (O'Neil 1995). A block-scheduling system that combines time in a manner somewhat different than the Copernican Plan, but toward similar goals, was proposed and implemented in the 1990-91 school year. This approach is called a "4x4 Plan" by some (Edwards 1995) because the school year consists of four ninety-day grading periods, and students take four ninety-minute courses each day. Wasson's version of the 4x4 Plan includes the following key points:

A. The educational program is offered in a school day of four instructional blocks of 90 minutes in length. There is a 15 minute passing period between the two morning classes and a 10 minute passing period between the two afternoon classes. Students and staff share a 50 minute common lunch period between the morning and afternoon classes.

B. No staff member teaches more than three of the four blocks. Sophomores and juniors take four blocks. Seniors take a minimum of three blocks.

C. Two-semester courses under a traditional system (180 meetings in 50 minute periods) are combined into a single semester (90 meetings of 90 minutes each).

D. Semester-length classes under a traditional system are offered in quarter-length classes (nine weeks). Under this plan, students change classes at the end of each nine-week grading period.

E. English/Social Studies and Math/Science are taught as blocks for two semesters by a team of two instructors per block.

F. AP courses are expanded in length. An AP course which was formerly one semester in length is now three quarters. Students enroll in an elective related to the AP course during the fourth quarter.

G. Some specialty courses meet daily during specified quarters. Band, Choir, Peer Counseling, Yearbook, and Journalism meet daily in 90 minute blocks during the quarters their program needs mandate such a schedule.

H. Department chairs receive some release time in the form of reduced teaching load to provide instructional leadership to the process.

I. The common lunch block of 50 minutes provides opportunities for clubs and organizations to meet within the instructional day.

J. Assemblies are scheduled before lunch by taking 15 minutes from each block, providing one hour for the assembly and still leaving 1 hour and 15 minutes for instruction in each block. One-quarter of the teachers are available to supervise the assembly, since they are not scheduled into a block at the concurrent time.

K. Under this plan departments explore the expanded opportunities for:
   1. Interdisciplinary teaching
   2. Interdisciplinary cooperative teaching and teacher exchanges
   3. Heterogeneous grouping (Adapted from Wasson Restructuring Committee 1990)

Although a semester course meets fewer minutes than its year-long equivalent, teachers report that they are able to teach comparable amounts of material (though they may not "cover" the same number of units they did in the past). Additional time is gained by decreasing the number of transitions and housekeeping tasks associated with beginning each class. The time available is utilized more effectively. Student involvement and attention are enhanced, and teachers and students are freer to interact. In addition, administrators and teachers report that students seem less stressed and more able to focus. A majority of students agreed with this assessment. A majority also report feeling better about coming to school, having fewer conflicts with teachers and fewer tardies, and believing that their grades had improved due to more frequent progress reports. Nearly 73 percent observe that teachers are using new teaching techniques. In a staff survey administered after the first year of the block schedule, teachers reported the following outcomes:

- In general, they noted an improvement in student achievement.
- They were able to provide more individualized attention and instruction to their students.
- They had implemented a variety of new teaching strategies and techniques.
- They were more willing to experiment with new assessment techniques.
- They spent more time preparing for each block class.
- Collegiality had increased.
- The time used for classroom administrative tasks had decreased.
- They felt better about the quality of their teaching.
- They made more parent contacts.
- Instructional units were less fragmented.
- Ninety-four percent would prefer to retain the block schedule.

A more radical reconceptualization of time is embodied in the Dalton Plan, an approach that has been around for generations (Edwards 1991). This method was developed in the early 1900s by Helen Parkhurst, a teacher who had experimented with the ideas of Maria Montessori and wanted to apply them to a secondary-school environment. It was named the Dalton Laboratory Plan because it was first implemented at a high school in Dalton, Massachusetts, in 1921. Edwards (1991) describes this plan:

> The Dalton Plan involved a complete restructuring of the school day into subject labs, with students determining their individual daily schedules. From fifth through 12th grades..., traditional classrooms were disbanded, schedules were eliminated, bells were silenced....
>
> [The Plan] was adapted by each school to fit its particular circumstances, [and] was student-centered, self-paced, and individualized by means of monthly contracts. An efficient, easy-to-use system of charts helped students and teachers keep track of progress. Usually the mornings in a Dalton Plan school were devoted to the academic disciplines in the laboratories, while afternoons were given over to more traditional physical education and music classes and to extracurricular activities.
>
> Each academic area had one or several classrooms designated as labs. All textbooks and library books dealing with a particular subject, along with any required equipment, were kept in that subject's lab. Tables and chairs replaced desks. Teachers were assigned according to their specialties and remained in the subject labs to help students with assignments when needed, to organize small discussion groups, to counsel, and to encourage....
>
> Central to the Dalton Plan were teacher-designed contracts that outlined activities geared not only to learning basic skills and concepts, but also to independent thinking and creativity.... All students completed activities to ensure a grasp of the basics, but they could then choose which other tasks and activities they wished to pursue. The more they undertook and the better they performed, the higher their evaluations.
>
> Each morning, with guidance from their homeroom teachers, the students selected which contracts they wished to work on and proceeded to those laboratories. They were required to remain at least an hour in a chosen lab, but they were then free to move to another or to stay longer. There were no 50-minute classes, no bells signaling a mass migration of students. Students could finish one month's subject contract completely before beginning others, or they could work on each contract piecemeal. If students completed work on all their contracts before the month was over, they could return to their favorite labs and do more, or they could request the next month's contract and move ahead. To ensure learning in all disciplines, students could not get a new contract in any one subject until all the others were satisfactorily completed. Those who fell behind because of illness, personal or family crises, vacations, difficulty with a subject, or excessive absenteeism simply continued working on the month's contracts until they were completed and then received the next set. (p. 399)

Middle schools, in particular, are implementing approaches that create blocks of time by having groups of teachers and students stay together for more than one period. The blocks create opportunities for these teachers to tailor time to the needs of the learning experiences they design. In such a model, one hundred students might each have the same teachers in the same order (periods 1-4) for the same subjects (language arts, science, social studies, art). Assuming forty-five-minute periods, the four teachers would have three hours in which to vary the amount of time each spent with students on any given day. They could also meet with larger or smaller groups of students each day. In other words, some days one teacher might take most of the students for some activity while the other three were free to work with small groups or individual students for an extended time.

Canady and Rettig (1995) describe three models for middle school scheduling. *The four-block model* has students spend ninety minutes each in language arts, mathematics, and either social studies or science. The third block rotates every other day, every other unit, or on some other basis. The fourth block is spent in physical education, music, and/or exploratory programs of study.

In this model, students attend three academic courses each day. Language arts and mathematics teachers teach three groups every day for the entire year, allowing them to get to know students better and provide continuity in instruction and assessment. Social-science and science teachers never see more than three groups per day, but work with six groups over the course of the year. The fourth block can be structured in many interesting ways to move students among learning options; however, teachers in this block also never work with more than three groups at a time.

Under the *75-75-30 plan* (Canady and Rettig 1993) the school follows a typical block schedule for the first 150 days. There are two seventy-five-day semesters, leaving thirty instructional days before the end of the year. During these final six weeks, students enroll in specialized courses created and designed by teachers. These courses provide additional learning time for those students who need it and academic-enrichment activities for all students.

The *concept-progress model* (Canady and Rettig 1992, Canady 1989) has been used to provide mathematics instruction to heterogeneous groups. Math classes meet on a six-day cycle with three teachers teaching one group of students. During day 1 and 2 all three teachers teach the same concept to all students. Then students are divided into two Progress Math Groups. These are flexible, homogeneous groups that are reconstituted frequently based on how well and which students understood the lesson presented during the two concept days. All groups work on the same math concept, though each group will be at a different level of challenge. Computer-based instruction also contributes to this model, with the software being adapted to the group's skill level.

This model provides whole-group instruction without the stigma of tracked ability groups. It also requires less testing on questions that some students know they cannot answer, and provides more opportunities to add depth of understanding to those students who quickly grasp new concepts, rather than simply accelerating them through the material.

Although block scheduling and its many variants are by no means new (see, for example, Vars 1984, O'Neil 1995b), larger blocks of time can be a valuable tool to enable faculties to achieve a number of goals simultaneously. Common planning time can be developed for teachers who work together in blocks. Teachers can discuss the problems and needs of individual students, since they are likely to know them better and are more able to modify practices to meet student needs or cope with the unique needs of particular children.

The potential of block scheduling may still be underdeveloped. Teachers may not take advantage of the opportunities inherent in the restructuring of time, because of either the difficulty of finding the time to integrate their practices or the lack of desire to surrender their autonomy to a team. Planning to work together to achieve common goals for students is not a simple task, and most teachers do not have professional experiences with collaborative planning that prepare them for the intensive involvement and interaction that occur under a truly integrated block program.

EXTENDING THE SCHOOL YEAR

The notion of abandoning the agricultural calendar and extending the amount of time students attend school has been mentioned frequently in recent years (Barrett 1990, Pipho 1990). However, such suggestions are more often vaguely defined statements of intent than clearly defined, well-reasoned policy initiatives. The implications of an extended school year are profound, both in terms of the fiscal resources needed to accomplish this change, and in terms of the implications for social traditions surrounding family vacations and economic enterprises built around the availability of the young during the summer.

The call to extend the school year is often based on the notion that children in other nations are spending more time in school and, as a result, are learning more than American students. It is often stated that Asian students spend 240 days a year in school. However, as Stevenson and Stigler (1992) point out, such statistics do not take into account that students attend only half-days on Saturdays, that recesses may last as much as five times longer than they do in American schools, that lunch periods can extend an hour and a half, and that many activities identified in American schools as afterschool activities may take place within the school day.

> So although Asian children spend more time at school than American children, the difference in the amount of academic instruction is not so profound as the more general statistics imply.
>
> Perhaps more important than the total amount of time spent in school is the way in which this time is distributed throughout the year. In contrast to the two-day weekends and long summer vacations that provide discontinuities in the American school year, time flows more or less continuously in Chinese and Japanese schools. School vacations in Asia are shorter and spaced more evenly throughout the year. Learning is an unceasing process, maintained by the momentum developed during regular classes....
>
> ... Throughout vacation periods, clubs and activity groups continue to meet, children may continue to receive homework assignments from their teachers, and new academic projects are begun. In these ways Asian students do have a longer "school" year, but much of the additional time is not spent in the regular classroom. (Stevenson and Stigler, pp. 143-44)

Initial efforts to extend the school year may have to focus on the groups most in need of the extra time: students who require additional learning opportunities and teachers who need time to develop new resources and techniques. It may not be cost effective or economically feasible for all teachers and students to attend school for a longer time, but it may be possible to phase in the concept gradually by first focusing on the needs of those students who will benefit most from carefully constructed programs utilizing extended instructional time. Perhaps the results from these initial applications will support the use of additional time to develop students individually, not simply to present more content to all. Another potential benefit of gradual implementation of a lengthened school year is professional development of teachers. An extended schedule can provide opportunities for many more teachers to engage in retraining to an extent not currently possible through inservice conducted during the regular school year.

The year-round school is another strategy that provides additional instructional time for those students who need it and gives teachers more opportunities for professional development. The year-round school is not a new concept in areas where overcrowding has forced educators to accommodate more students in existing school buildings. In year-round schools, students usually attend three quarters out of four, or a total of approximately 180 days annually (Ballinger 1988).

Between 1986 and 1994 the number of schools employing some form of year-round schooling increased from 410 schools enrolling 354,000 students to 2,252 schools enrolling 1,650,000 students (Ballinger 1995). These schools have at least six reasons for implementing a schedule that promises to help enhance student retention of basic skills (Ballinger 1995).

- Some students need more time than others. A year-round schedule can accommodate the needs of those students more readily than can a schedule that essentially requires that all students take three months off from school.
- Intersessions can be designed to offer remediation and enrichment and also provide a forum for testing new and innovative curricular ideas.
- Students whose first language is not English benefit by being able to continue to develop their language skills continuously without long layoffs from English.
- Student motivation and interest are heightened when periodic vacations occur throughout the year, allowing teachers and students to continue refreshed and ready to teach and learn.
- Cocurricular and extracurricular activities can take place throughout the year, including sports, clubs, and special activities such as preparing for college-placement examinations or special academic competitions such as science fairs or speech and debate tourneys.
- Teachers can take advantage of year-long staff development opportunities by taking courses throughout the year and by applying some of their new skills immediately in the school where they normally teach, since school is in session even when a proportion of its teachers are off duty and taking courses.

With some modification, models developed for year-round-school programs that have been implemented successfully throughout the nation could guide the transition to a longer school year. Such a transition could make teacher retraining easier, since teachers could be paid during their "off" track to participate in training. They would also have a ready-made "laboratory" in which to practice their new skills and techniques without the pressure of a full teaching load, since "regular" school would be in session, and the teacher would already know many of the students.

Beyond these approaches to extending the school year, some schools are experimenting with extending the school day, from early morning to late evening, to reflect changing realities of students' lives and to become in larger measure community centers. For example, the Murfreesboro, Tennessee, City Schools have doubled the amount of time that schools are open (Jones 1995). Elementary schools stay open five days a week from 6 a.m. until 7 p.m. year-round, offering a series of recreational, academic, artistic, and life-skills programs. Parents pay for these services but at a rate that makes them highly affordable and desirable. Therefore, more children participate and the district is able to fund the program successfully. Title I funds also are used, and the district saves some transportation money since large numbers of children are dropped off and picked up by their parents.

Teacher assistants work from 11 a.m. to 5 p.m. helping provide coverage and continuity to afterschool activities. Teachers end their work day at 1:45 p.m. for a quarter of the year, leaving 67.5 hours to be assigned during extended school hours. Specialists are also hired to teach particular topics after school. School buildings are now in use twice as many hours as they were.

The unfortunate reality is that the need for custodial care for children has continued to increase during the past two decades, and there is every indication that the trend will continue through the next decade. More children are in need of custodial care for two primary reasons: the increased participation by women (many of whom are single mothers) in the labor force, and the breakup of traditional community and of extended and nuclear family structures.

While many educators resist the notion of defining schooling as being primarily for the purpose of custodial care, few true alternatives exist in many communities. In any case, meeting this need provides continued institutional legitimacy to schools. To extend care beyond the boundaries of the school day requires interagency coordination, since schools do not have the resources to do so alone. However, school buildings represent an underutilized resource in most communities. Extending the amount of time they are available for children will not only help improve education for these children, but also can strengthen the sense of community that surrounds the school.

The factors limiting school districts' ability to lengthen the school day and year are money, teacher resistance, and lack of organizational adaptability. Simply adding more days to the existing schedule costs money that few districts will ever have. Even if the money could be provided, teachers are reticent to work more days.

A survey of Oregon educators' reactions to a multifaceted reform law passed in 1991 found teachers believed all aspects of the law, including more accountability for schools, site councils, and mastery certificates, would lead to improved student learning. The only element in the law they did not believe would improve student learning was lengthening the school year (Conley and Goldman 1995). Here is one change that throws the interests of adults and children into potential conflict.

Similarly, the economic interests of many people are affected when summer vacations are changed or students are less available to work at afterschool jobs. Finally, most schools are simply too stuck in their ways to disrupt basic routines by changing the way time is structured. People are creatures of habit, and few habits get more ingrained than daily (and yearly) schedules. Changing the routines, though difficult, can open the doors to other more profound changes and can create a more adaptive organization.

CAUTION: CHANGE IN THE ENABLING VARIABLES IS NOT NECESSARILY RESTRUCTURING

Time is often the first variable examined by high schools when the idea of restructuring is raised. It is attractive because it appears to offer a "quick fix" that leaves the content of instruction fairly intact. A coalition of faculty supportive of some sort of change in the arrangement of time can often be built. However, teachers may join this coalition and administrators may offer support for widely varying reasons. Some of the reasons may be more related to easing the working conditions for the adults than to improving learning conditions for the children.

This is not to say that such investigations of alternative schedules are without merit; quite the contrary. At the same time, it is important to foreshadow here a series of issues related to the process of restructuring, issues that are discussed at greater length in part 4. One key issue to keep in mind when considering change in any of the enabling variables (learning environment, technology, school-community relations, and time) is that specific programmatic responses must be considered in relation to broader organizational goals or purposes, generally stated in the form of academic standards. These overarching statements of purpose help provide a framework within which specific actions or programs might be considered. Making sure that programmatic changes, such as a revised schedule, are tied directly to enabling students to achieve the school's standards helps prevent the spread of "projectitis" and the subsequent failure of the project if coalition members cease to support the innovation.

One of the problems with most of the approaches to modifying the allocation, organization, or amount of time devoted to instruction is that such changes are unlikely to make much difference so long as learning continues to be conceived of in terms of hours spent on a topic or in a course. This traditional conception of learning will always engender pressures to return to standardized and uniform application of time to learning tasks. And such pressure is understandable. As long as teachers think of their subjects as being independent from one another, and think of learning as being the exposure of students to material for a specified period, they will demand their "fair share." Moving to performance-based, standards-driven systems can help to break the constraints imposed by rigid structures of time.

SOME COMMON THREADS IN THE FOUR ENABLING VARIABLES

We have now come to the end of the four dimensions of educational restructuring that make up the subcategory of enabling variables. The common thread present in much of the discussion of these enabling variables (chapters 13-16) is the goal of recreating schools as communities and of deepening student understanding and mastery of what they are learning. Almost all the changes examined here, particularly in the areas of learning environment, school-community relations, and time, are geared toward humanizing and personalizing the interactions that occur within schools and helping ensure as many students as possible get to high levels of cognitive functioning. Even technology is being conceptualized as a tool to enhance the social and cooperative dimensions of learning in addition to its role as a gateway to a much richer and more challenging curriculum.

Changes in these enabling variables, then, support the transformation of the learning environment into a place where students take responsibility for their learning, are assisted by many adults and other children, have strong feelings of affiliation with the school and the people in it, know what is expected of them, and are actively engaged in achieving standards that provide a framework for assessing their learning.

The supporting variables, which follow in chapters 17-20, help establish and define the organizational context within which this learning takes place. They can be critically important because that context can either support or inhibit the ability of adults and children to bring about the changes in learning described up to this point.

GOVERNANCE

Governance and three other dimensions—teacher and principal leadership, personnel, and contractual relationships—set limits on and define potentialities for change in educational practices, rather than directly causing changes within classrooms. For this reason, these four dimensions are classified as *supporting variables* in contrast with the central variables discussed in chapters 9-12 (standards, curriculum, instruction, and assessment) and the enabling variables in chapters 13-16 (learning environment, technology, school-community relations, and teaching/learning time).

Ideally, schools would begin their restructuring efforts by reaching some common agreements about how they wanted learning to look different and/or better by developing their goals for changes in the central variables. Then they would examine the learning context as represented by the enabling variables to align that context with the changes sought in the central variables. While such plans were being made, changes in the supporting variables of governance, teacher/principal leadership, personnel, and contractual relationships would be prepared to allow or support the achievement of the goals being pursued through the central and enabling variables. In practice, change almost never occurs in such a logical, sequential fashion.

Many, perhaps most, efforts at school restructuring start with or are defined as changes in the dimension of governance, usually in the form of decentralized decision-making. In fact, for many educators and scholars the term *restructuring* itself refers only to changes in governance.

Often schools begin with projects in the area of governance or perhaps teacher leadership or working relationships, proceeding on the belief that once organizational parameters have been altered, substantive change will follow. Although such alterations may facilitate and support changes in curriculum and instruction, it appears that they rarely cause change in these core dimensions. A number of schools have found that they have directed all their energy for restructuring toward projects related to these supporting variables, and had little left to address fundamental issues of practice more closely related to the classroom and children.

TWO STRATEGIES FOR CHANGE

Change efforts in the governance of schools can be grouped into two general categories. One type attempts to decentralize power to school sites to enable those closest to the process of teaching and learning to solve the problems they identify; the other attempts to create external competition through a variety of strategies including vouchers, privatization, and charter schools to compel fundamental change in education and to challenge the monopoly held by the public schools.

Changes in the first category come under names such as site-based management, decentralized decision-making, site-based decision-making, and participatory decision-making. All refer to greater decision-making authority and responsibility at the school site; these changes redefine power relationships within school districts.

Changes that fall into the second category are generally referred to under the heading of "choice." Included are mild forms that allow greater choice within a school or district for students and parents; policy initiatives and pilot programs designed to allow interdistrict movement of students, generally attached to some mechanism that causes funding to follow the student to whatever school he or she chooses to attend; charter schools that combine elements of both decentralized decision-making and choice; more radical voucher programs that allow unlimited options for parents within and outside the public school system; and, in a limited number of districts, experiments with allowing private companies to run schools.

There is a linkage between these two strategies for changing schools, according to Hill and Bonan (1991), who state that "the ultimate accountability mechanism for a system of distinctive site-managed schools is parental choice." The underlying assumption in both approaches is that people outside the educational system need to exert more influence on schools and educators, and that these external forces will hasten the change and improvement process. What many reformers did not adequately anticipate is that this influence can take schools in any of a number of different directions, including "back to the future," toward very traditional models of education as the solution to today's educational problems.

I consider in turn each of these two strategies along with the policy implications and assumptions of each. I also look at some examples of the application of these concepts through state policy and school-site experiments.

SHARED DECISION-MAKING, SITE-BASED MANAGEMENT, AND LOCAL SCHOOL COUNCILS

As mentioned earlier, the perception people have regarding their relationship to large institutions in society may be changing. More people expect to be involved to a greater degree in decisions that affect their lives. Challenges faced by organizations are becoming so complex that most solutions require those closest to problems to be actively involved in developing and implementing responses. However, involving people in decision-making has its own set of difficulties. As educators move to involve more stakeholders in decision-making, they are beginning to wrestle with those issues and the tensions and tradeoffs that accompany changes in power relationships. The redistribution of power in organizations is rarely accomplished without stress and conflict. Participatory decision-making, site-based management, and their variants are certainly no exception in this regard. As popular as these approaches have been, both among educators and legislators, it appears that they must be designed and implemented with great care if they are to have an effect on student learning.

Jane David (1995/96) suggests site-based management may be "the most significant reform of the decade—a potential force for empowering educators and communities. Yet no two people agree on what it is, how to do it, or even why to do it" (p. 4). She cites a series of examples from states that have embraced site-based management and participatory management whole-heartedly.

Kentucky requires schools to have councils with teachers, parents, and the principal and allows the council broad discretion over fiscal matters and school policy. Maryland and Texas require schools to have school-based decision-making teams with more diffuse authority.

Chicago places significant authority in the hands of local school councils, to the point of allowing them to hire and fire principals. Denver, Cincinnati, Memphis, and Dade County, Florida, all had decentralization programs that expanded the power of schools to make decisions. Oregon requires all schools to have site councils with responsibilities for school improvement and professional development.

These diverse programs have been undertaken for a variety of reasons. In some cases the goal is to transfer authority from a central office that has run the district with an iron fist and unquestioned authority. In other cases states seek to move decision-making power from the state level directly to schools with the goal of increasing school-level accountability for student learning. In some communities participation in decision-making is an end in itself, based on a belief that democracy in and of itself is a valuable tool that will eventually improve schools. Some districts have seen decentralization as a tool to save money by reducing central-office staff without necessarily considering how lost centralized services would be replaced.

In some cases, decentralization and participatory decision-making are coming about out of frustration. All external efforts to change the schools over the last twenty years seem to have been largely ineffective, so why not put the responsibility on the schools themselves?

David (1995/96) identifies a series of characteristics that sound site councils have in common. When councils are effective in addressing issues of student learning and school improvement, they tend to have the following elements in place:

- A well-thought-out committee structure
- Enabling leadership
- Focus on student learning
- Focus on adult learning
- Schoolwide perspective
- Long-term commitment from the district or state
- Curricular guidance in the form of broad learning goals or standards against which student learning is measured
- Opportunities for learning assistance
- Access to information on student learning, budgets, legal requirements, etc. (pp. 7-8)

Guskey and Peterson (1995/96) believe that a variety of specific problems keep schools from improving teaching and learning through site-based decision-making. Several of the most important issues include:

- *The Power Problem.* While a site-level structure for decision making is created, true power remains where it always has been—with school boards, central office staffs, and state authorities (Bimber, 1994).
- *The Implementation Problem.* Making local decision-making structures function well is an extremely difficult and complex process. There are procedural issues, skill training, confusion over goals and overlapping authority.

- *The Ambiguous Mission Problem.* Councils need clear missions focused on improving student learning. Most do not have this clear focus and the authority necessary to have a positive effect on learning.
- *The Time Problem.* Meetings take time. Groups need to develop norms, take time to debate and discuss, and are generally less efficient than other modes of decision making. The school day allows few opportunities for groups to engage in thoughtful reflection.
- *The Expertise Problem.* Those called on to make decisions rarely have had the opportunity to develop the expertise in areas such as research on student learning, effective schooling practices, methods of budgeting, etc. This can result more in shared ignorance than enlightened decision-making.
- *The Cultural Constraints Problem.* The culture of the school defines historical patterns of participation. School councils often violate these cultural norms, redefining roles and upsetting the social hierarchy. Many schools have cultures of isolation where teachers believe they should be left alone to teach, and that they should have unquestioned authority to make decisions within their own classroom.
- *The Avoidance Problem.* School councils may choose to deal with every issue except those that relate to student learning and practices within classrooms. In some cases this may be due to lack of confidence to make decisions in these areas.
- *The Motivation Problem.* The creation of school-level decision-making bodies assumes people at the school want to be involved in making decisions. Sometimes this is true; other times it is not. Participation in elections for site councils has been very low in many places (David, 1994). Many teachers look at the demands of a site council and opt to expend their energy in activities more directly related to students. (pp. 11-12)

Wohlstetter and Odden (1992) suggest it is time to rethink school-based management. Their review of the research on school decentralization leads them to conclude "that school-based management (a) is everywhere and nowhere, (b) comes in a variety of forms, (c) is created without clear goals or real accountability, and (d) exists in a state/district policy context that often gives mixed signals to schools" (pp. 530-31).

> Surveys by Clune and White (1988) and Malen et al. (1990b) concluded that school systems all over the country are involved in SBM. However, when programs are analyzed, the general conclusion is that the extent of decision-making responsibility devolved to the school is limited; consequently, site teachers and administrators have little to manage, particularly with respect to budget, personnel, and curriculum strategies

(Clune & White, 1988; Malen & Ogawa, 1988; Wohlstetter and Buffett, 1992). Thus many studies conclude that SBM has not been much of a change because nothing real has been decentralized—SBM is everywhere and nowhere....

... Although SBM is used as a generic term for a range of decentralization activities, there are three very specific forms of SBM, yet few studies differentiate among them.... One SBM governance model, "community control," shifts power from professional educators and the board of education to parent and community groups not previously involved in school governance. Thus lay persons, not the professional hierarchy, are in control and accountability is directed outward toward the community (Ornstein, 1974, 1983). The current reform strategy in Chicago, Illinois is an example of this model....

A second SBM model, "administrative decentralization" (Ornstein, 1974), features teacher control by delegating decision making down the ranks of the professional hierarchy to building-level educators. Thus individual schools, typically through site councils where teachers have the majority, are empowered to make some decisions formerly made by the central administration. In Los Angeles, California, for example, local school leadership councils have between 6 and 16 members (depending on the level and size of the school) and half of the council seats are reserved for teachers....

A third SBM model features "principal control" and, in contrast to the other two forms of decentralization, may or may not have a site council. In Edmonton, Canada, for example, district policy stipulates that principals are responsible for constructing the school budget "in consultation" with staff, parents, and community members, but the principals are not required to establish site councils and much of the consultation is conducted informally on an ad hoc basis (Wohlstetter & Buffett, 1992)....

...[R]esearch to date suggests that each form of SBM faces different obstacles and experiences different measures of success. Some SBM models of the past, particularly the New York City decentralization model of the 1970s, put the community in control; however, the general feeling is that New York City schools have not improved with the devolution of power from the central office to lower-level organizations (Fantini & Gittell, 1973; Zimet, 1973)....

Other than being justified rhetorically as a means to improve schools, SBM plans rarely entail specific learning goals for students or have accountability mechanisms that assess SBM with respect to those goals or organizational improvements (Wohlstetter & Buffett, 1992). Rather, SBM's impact is focused mostly on teachers and administrators....

... Wohlstetter and Buffett (1992) found that district-initiated SBM programs often ran afoul of state rules and regulations and that state-initiated SBM reforms, even when implemented by some schools, often ran afoul of district rules and regulations. State-initiated SBM also can run into problems when districts and superintendents do not support it and/or

> do not have complementary policies. As a result, site teachers and administrators get mixed signals or contradictory support from different levels of the policy system. Both are a hindrance to real school-based decision making. (Wohlstetter and Odden, 1992 pp. 531-36)

Hill and Bonan (1991), in a study of five school districts where site-based management had been employed extensively, conclude that simply involving more people in decision-making is unlikely to lead to improved student learning outcomes unless it is viewed as being of central importance and considerable time and support are given to nurturing its success. Hill and Bonan view site-based management as a systemwide reform, requiring central-office administrators, principals, and teachers to rethink their roles. Site-based management "cannot function simply as a new way of conducting labor-management relations or increasing teacher job satisfaction.... [S]ite management must focus on instruction, not on labor-management tensions."

These two authors also emphasize that new accountability methods should accompany increased decision-making responsibility: "Site-based management makes school staff, not the central office, accountable for school performance." They suggest it may take schools two to three years to redefine roles and focus energies on instructional issues. As schools evolve, they will develop distinctive characters, goals, and operating styles. Ultimately, Hill and Bonan contend, parental choice will guarantee accountability in a site-managed school system.

Malen, Ogawa, and Kranz (1990a), in a review of nearly 200 documents describing current and previous attempts to use site-based management in the United States, Canada, and Australia, conclude that "site-based management in most instances does not achieve its stated objectives." They found that site participants rarely addressed issues of central importance to schools: "Teachers and parents frequently characterize the subjects councils and committees consider as 'routine,' 'blasé,' 'trivial' or 'peripheral'." The councils busied themselves implementing district directives or tending to the operation of the building. The control exerted by principals limited the amount of teacher (or parental) involvement in decision-making. Councils rarely received the technical assistance, information, training, or funds necessary to function successfully. Malen and others conclude that "there is little evidence that site-based management improves student achievement."

More recent studies tend to affirm this conclusion. Conway and Calzi (1995/96) surveyed the literature on worker involvement in decision-making and effects on productivity and concluded that about two-thirds of the studies found increased satisfaction, not necessarily increased productivity. They cite Weiss's 1993 study of twelve high schools in which he concluded that teachers in shared decision-making environments feel more professional and enjoy the increased authority and collegiality, but that the results do not translate into increased emphasis on teaching. As Weiss stated, "So far it looks like an OK deal for teachers, but perhaps not a great one for students."

Kentucky is one state that has given local councils real authority. Under the Kentucky Education Reform Act, councils have decision-making authority in sixteen areas, including principal selection, textbook selection, curriculum, staff assignment, student assignment, school schedule, instructional practices, discipline, extracurricular programs, and alignment with state standards (Kentucky Revised Statutes 1995). These councils have experienced varying degrees of success, both as councils and as positive forces affecting student learning.

By late 1995, councils functioned in 66 percent of Kentucky schools. The most effective councils were those that represented their local constituencies; had the support of the political structure within the local community, district, and school; avoided becoming consumed with legalistic questions and issues and focused instead on learning; and developed decision-making processes that promoted democracy with all its attendant difficulties and challenges (Lindle 1995/96).

PARTICIPATION FOR WHAT PURPOSE?

When educators consider strategies for increasing stakeholder participation in decision-making, they might benefit by asking one question first: Why are we doing this? Research on teacher involvement in decision-making in particular (Duke, Showers, and Imber 1980; Weiss 1993; S. Conley 1991) seems to indicate that such involvement in and of itself does not necessarily lead to improved organizational outcomes:

> Do students actually learn more or drop out less in a more participatory school environment?... [T]he indirect benefits of participation received by employees (e.g., satisfaction) provide an unpersuasive rationale for participation in many organizations, because the benefits of participation are likely to be viewed by managers as one-sided (Shedd, 1987). (S. Conley 1991, p. 230)

Processes for teacher participation in decision-making have yet to resolve problems that arise in determining what decisions teachers want to make. There is evidence (Bridges 1967; Mohrman, Cooke, and Mohrman 1978; Maeroff, November 1988) to suggest that teachers are not currently involved in decisions related to teaching and classroom conditions, despite the fact they have shown more interest in "operational decisions pertaining to direct student instruction than to strategic school administration"; "teachers appear to feel most deprived in decisions... that regulate the boundary between the classroom and the organization" (S. Conley 1991, p. 236).

Teachers want to be involved in decisions that they perceive as contributing to their ability to do their jobs more effectively. When teachers can be made to feel more in control of the conditions of their work environment, their sense of personal efficacy is enhanced (Fuller and others 1982, Lanier and Sedlak 1989, Rosenholtz 1989b). For most teachers, this sense of personal efficacy is a critically important contributor to the decisions they make and the behaviors they demonstrate. If teachers do not feel they can educate students successfully, they act one way; if they feel they can influence the conditions affecting success, they act another way. Herein lies one of the key potentialities of teacher involvement in decision-making: enhanced teacher efficacy.

How might teacher involvement in decision-making be promoted in ways that are meaningful to teachers and toward ends that are valuable to the organization? S. Conley (1991) suggests that

> rather than simply assuming that established forms of participation are not working, the question becomes, What are the specific advantages and disadvantages of these forms? That is, to what degree have more conventional participation forms offered teachers opportunities for involvement in school decisions? (p. 245)

How do traditional decision-making structures, such as departmental organization, teacher teams, grade-level meetings, and various standing and ad hoc committees function? What are their defects? Is the problem in the structure or in its implementation? The ways in which administrators support and facilitate involvement can be a critical factor in determining the degree of validity teachers ascribe to the process (Corcoran 1987).

School-level decision-making can be a useful tool in the right context, for the right purposes, with the right support. However, these subtleties are often lost on policy-makers (and educators) whose well-meaning belief in democracy as a positive and desirable end in itself often obscures the gap between the potential power of participation and the true complexity of its actualization.

The research to date paints a consistent picture of site-based management as an innovation that requires a specific set of circumstances in order to be successful. When those circumstances exist, the innovation has usually met its designers' intention. Numerous examples exist of schools that have improved their effectiveness after adopting participative decision-making, and an equally compelling body of evidence shows the positive effects involvement and participation can have on student learning when the participation is structured in a thoughtful and meaningful fashion and is supported and nurtured by the organization (Murnane and Levy 1996; Short, Greer, and Michael 1991; Short and Greer 1993; Newmann and Wehlage 1995; McCarthy and Still 1993).

Unfortunately, these success stories are lost when they are included within large-scale studies with dozens of other schools that have paid little attention to the contextual factors that must be addressed for site-based, participatory decision-making to have a positive effect on student learning.

ALTERNATIVE CONCEPTIONS OF POWER

New governance structures are being developed and employed in many schools around the nation (see, for example, Ayers 1991; Clinchy 1989; D. Conley, March 1991; Dentler and others 1987). These structures will not automatically solve the problems of broad-based participation in decision-making. S. Conley (1991) provides insight into the underlying cause of the tensions this process creates:

> New forms of participation, such as school governance structures (Malen & Ogawa, 1988), appear to be generating uneasiness among teachers and administrators as both parties reassess their respective roles (Lieberman, [May] 1988). Apprehension may be partially due to a failure to distinguish between two critical dimensions of power: authority and influence.... Authority deals with final decision-making power, referring to the ability of an organizational member to say yes or no to a particular decision. Authority stems from the legal right to make decisions governing others; for example, principals have the authority to assign students and teachers to classes, and teachers have the (de facto) authority to implement instruction (Bacharach & Mitchell, 1987). Influence, by contrast, stems from the capacity to shape decisions through informal or nonauthoritative means, including personal characteristics (e.g., charisma), expertise, informal opportunity, and resources (Bacharach & Lawler, 1980). (S. Conley 1991, p. 253)

Although the distinction between authority and influence is a useful one, there are perhaps additional ways to think about how power might be distributed and managed in organizations. Dunlap and Goldman (1991) and Goldman, Dunlap, and D. Conley (1993) describe an alternative concept—facilitative power—and describe its use in schools. This representation of power relations parallels S. Conley's analysis in many important respects. However, it employs different language and images to describe power relationships:

> Facilitative power has been neglected in theory and research about power in organizations, but school leaders increasingly use facilitative power as

> an alternative to authoritarian power. In exercising facilitative power, leaders can create or sustain favorable conditions for subordinates to enhance their individual and collective performances. If dominance is power *over* someone, facilitative power is power manifested *through* someone, resembling the images of electrical or ecological circuits of power described by Clegg (1989) rather than images that describe objects (or people) being moved by force. Facilitative power is not zero-sum but is interactive and additive. Dunlap and Goldman (1991) suggest that facilitative power in schools involves (a) acquiring or arranging material resources that support staff activities and aspirations, (b) creating synergy by grouping staff who can work together effectively yet collectively possess the skill mix required for designated tasks, (c) supervising and monitoring activities to provide feedback and reinforcement, and (d) using networks to provide links between the school and the outside world. In addition, we suggest that there are (at least) three additional dimensions of facilitative power: (e) collecting and distributing information to allow greater control over the conditions of work and methods of teaching, and broader participation in decision making; (f) lobbying informally to cause movement toward goals, as opposed to exercising authority in the context of formal meetings; and (g) serving as a role model of the organization's vision. (Goldman and others 1993, p. 70, emphasis in original)

In this concept of facilitative power, administrators (and teachers) create the organizational conditions for certain ends to be pursued. They work with and through people to achieve outcomes valued by members in the organization. New governance structures may be more likely to succeed if they are accompanied by new ways of thinking about power. There is nothing magical about a structure. At best, it increases the likelihood that certain things may occur, but a structural change guarantees nothing. If, at the same time, the players within the system rethink their relationships and, if possible, their conceptions of power, new structures can have remarkable effects.

DECISION-MAKING AND CHOICE

The next logical extension of decentralization beyond site-based decision-making is the notion of Education by Charter (Budde 1989). In this method, teachers and schools in effect become independent contractors within the school district. They can apply for a special status, a charter, to operate on a contract basis to provide educational services to students outside the normal structure and regulations of the district. The board of education sets the procedures for establishing and evaluating educational charters, and the central administration provides certain services to all charters, such as payroll and planning.

Groups of teachers petition the school district to sign an "Educational Charter" that authorizes the teachers to create and provide a complete educational program for students—in essence, their own school—within certain legal and policy parameters established by the school board. They receive funding equal to the district per-pupil allocation minus administrative and other fixed costs. The teacher team has complete discretion in organizing the educational program and in determining how money is spent. Obviously, to sustain such a program economically, the teachers need to be able to attract enough students.

There are basically two types of charters: those where new schools are created, and those where an existing school "converts" to charter status. The more than twenty states that have adopted charter legislation fall into two basic categories as defined by Kolderie (1996): "live" law states, where a strong law has resulted in the creation of numerous charters of varying descriptions; and weak-law states with legislation that makes it difficult or impossible to create a charter in actuality. Kolderie identifies a number of states with strong laws, including Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Massachusetts, Michigan, Minnesota, New Jersey, North Carolina, and Texas.

Minnesota was one state of the first states to enact a law allowing both public and private schools to receive charters.

> Under the charter-schools measure passed by the legislature [in] May [1991], school boards can authorize one or more licensed teachers to create new public schools that would be free from most current rules and regulations. The law also enables existing private or public schools to become charter schools....
>
> Such schools must meet state standards for what students should know, and may not screen students, charge tuition, or have a religious affiliation. The law allows up to eight such schools statewide.
>
> But the charter schools are to be educationally, financially, and legally independent: able to hire and fire their employees, devise their budgets, and develop their curriculum. Each school must be run by a board of directors, a majority of whose members are licensed teachers. (Olson, November 27, 1991, p. 18)

In September 1992, California became the second state to allow charter schools (Olson, September 30, 1992). The California measure allowed for up to one hundred such schools to be established, providing many more opportunities than the Minnesota program, with its limit of eight schools. Furthermore, the California law allowed a district to convert all its schools to charter status. The measure was introduced at least in part to head off support for a private-school voucher initiative that was in fact defeated in the 1994 election. The voucher proposal would have given parents the right to choose to send their children to public, private, or parochial schools at taxpayer expense.

Charter schools amount to choice within the public schools, or within a structure controlled by the public schools or the state education system. In effect, they seek to combine a controlled voucher plan with incentives to stimulate the development of new responses and solutions to many of the ills that beset education—solutions that might not be possible in current public schools with their structural and political barriers to fundamental change. Charter schools hypothetically provide a middle ground between no choice and an unrestricted voucher plan, which would allow parents to abandon the public schools and take their vouchers wherever they chose.

A typical system to allow a new charter school to be created or an existing school to convert to charter status would begin with a request to establish a charter school initiated by teachers, parents, or some combination of the two. At least 10 percent of the teachers in a district or 50 percent of the teachers in a single school would have to sign the petition. The school board would then review the proposal. If approved, the school would be granted a charter to operate for five years, with five-year renewals. Schools would then be exempt from most state regulations. They must, however, specify their educational program, the outcomes students will be expected to meet, and how progress toward achieving these goals will be measured. The California law, for example, contains provisions to ensure that basic equity issues are addressed for students; however, teachers' rights to remain part of a local bargaining unit are not maintained, raising the concerns of the teachers' unions.

Charter schools can set admission criteria, but the racial and ethnic composition of the school has to reflect the student population of the district. If the local board of education denies a request for a charter twice, the decision can be appealed to the county board of education.

Charters are distinguished by the increased involvement of parents, teachers, and community members. Most charters are founded by dedicated individuals who have a vision of what education can or should be. For the charter to succeed, a group of like-minded individuals must be attracted and committed to this vision. In this sense charters are like successful vision-driven schools. They can align their practices with their vision. They can do this more effectively than public schools primarily because they have more flexibility regarding whom they hire to teach and whom they admit as students. These schools generally require more "hands-on" involvement in governance by parents and teachers. As noted previously, this type of involvement is generally associated with enhanced student learning.

Twenty-five states had some sort of charter-school law in 1996. In all, more than 225 charter schools were in operation during the 1995-96 school year (Finn, Manno, and Bierlein 1996). The first six states with charter-school laws granted the most autonomy: Minnesota, California, Colorado, Massachusetts, Arizona, and Michigan. Nearly 250 schools were authorized in the legislation allowing charters in those states. In contrast, in the five states that enacted more restrictive laws—Georgia, New Mexico, Wisconsin, Hawaii, and Kansas—only eighteen schools were approved by late 1995. Other states approving restrictive laws in 1995 included Alaska, Arkansas, Illinois, Louisiana, Rhode Island, South Carolina, and Wyoming (Bierlein 1995/96).

Charter laws approved in 1996 tended to be stronger. Connecticut, Florida, Illinois, New Jersey, North Carolina, and South Carolina all passed laws in 1996 (Johnston 1996).

It remains to be seen whether the charter experiments in places like Minnesota and California will lead to the creation of new educational environments, or will simply recreate isolated versions of the existing public school system. Early research in California suggests that about a third of the districts were planning to disseminate effective practices used in charter schools; that metropolitan charters, while experiencing more resistance, offered greater hope as true alternative educational models than rural charters; and that charters have yet to capture the imagination of California educators (Dianda and Corwin 1994).

The charter-school model does offer the potential for creating communities where people feel they have chosen to be there, and where those people can define themselves and organize their schools on the basis of distinct value and belief systems regarding education, thereby counteracting the bland bureaucratic sameness of most American schools.

Early charters appear to be addressing some concerns about their willingness to educate students with special needs. Finn, Manno, and Bierlein's (1996) site visits to thirty-five charter schools found that 19 percent of the students had disabilities or impediments that affected their education. "Thus it appears that, contrary to some forecasts, charter schools are serving proportionately more disabled youngsters than are conventional schools."

Nathan (1996), who was heavily involved in the creation of Minnesota's pioneering charter-school law, delineates the elements of a charter school and the key early lessons learned from states that have "effective" charter-school legislation. In the following section, I have summarized Nathan's observations.

ELEMENTS OF CHARTER SCHOOLS

1. The state will authorize more than one organization to start and operate a charter public school in the community. The "exclusive franchise" of the public schools would be withdrawn. Other publicly accountable groups, that is, universities, city councils, county commissioners, could also sponsor schools. Anyone wanting to start a school could approach any of these agencies, not just the local school board. School districts would not be able to take students for granted. They would be motivated to improve their programs and meet student and parent needs.

2. The newly organized (or converted) schools would be public schools. They would not be able to charge tuition, discriminate, or have a religious affiliation. They would be open to all students and subject to applicable health and safety regulations.

3. The schools would be responsible for improved student achievement. Schools would have three- to five-year "performance contracts" with their sponsoring agency. If a school failed to meet its performance goals, it would be closed.

4. In return for this accountability for improved results, the state would grant an upfront waiver of virtually all rules and regulations governing public schools. This provision has many implications, including credentialing requirements for teachers, curriculum requirements, length of school day, accounting procedures, transportation obligations, school-lunch programs, and others.

5. The charter school would be a school of choice. Parents, students, and teachers would have to select the school. If not enough people selected a school, it would be closed. No one would be assigned to a charter school against his or her will.

6. The school would be a discrete entity. The school could choose its legal status and structure. Teachers might choose to bargain collectively, but would not be subject to a district's contract.

7. The full per-pupil allocation would move with the student. The dollar amount would approximate the state or district average appropriation. Extra funds for special education or low-income students would also follow the student.

8. Participating teachers would be protected and given new opportunities. They might choose to remain part of the state's retirement and benefits system or establish their own cooperative. They might become a not-for-profit corporation. They might take a leave from their current school system and retain their seniority.

KEY EARLY LESSONS

1. Charter schools can have a positive impact on student achievement, attendance, and attitude. A number of schools, in their own evaluations, have compiled evidence of improved student attitudes and student achievement.

2. Many charter proposals focus on low- and moderate-income youngsters. A survey in 1995 of 110 charters in 7 states found most had at least some focus on "at-risk" students. Other studies found higher proportions of minorities in charter schools than in the comparable school districts.

3. Many talented educators will accept responsibility for results, in exchange for considerable autonomy. Once the ability to create charters was offered, many teachers and administrators from the public schools seized upon the opportunity. There is a reservoir of creativity in the public schools waiting to be unleashed.

4. Good ideas aren't enough. Charters need people who know how to run a "startup" operation. Many educators have spent their entire careers in the cradle of the bureaucracy and are ill-prepared to cope with the stresses of creating their own organizational structure, much like a small business.

5. Charter schools can be located in places other than a traditional school building. There is nothing magical about the institutional architecture of schools. Storefronts, VFW halls, community centers, museums, and many different places can house a school or serve as its "home base."

6. One of the biggest challenges facing charter schools is where to obtain startup funds. Charters do not have the authority to acquire bonded debt. Nor do they have access to capital-improvement funds from the state. This means that the "big ticket" startup costs can easily overwhelm a charter.

KEY POLICY LESSONS

1. The charter idea encourages school districts to improve. Districts that had ignored parent requests for new programs became more responsive when parents launched their own charter initiatives. The districts moved to "preempt" the parent programs, which resulted in parent needs being met.

2. The strongest state charter laws produce much more activity. States that allowed charters to be sponsored by organizations other than school boards generated the most charter programs.

3. Many charter opponents have shifted legislative strategies. Rather than opposing charters outright, they now support more limited programs where local school boards must approve the charter.

4. Charter-school legislation offers important opportunities for unions. Unions themselves are establishing charter schools. Some unions are learning how to subcontract with charters for specific services. Many charters retain union affiliation.

5. The charter-school movement can learn from the sometimes frustrating experience of successful innercity alternative public schools. Much of what is now being proposed as "new" for charters was tried extensively in the late sixties and early seventies. In many cases, though, these alternative schools were limited to "at-risk" student populations. As a result, the lessons were never generalized across the school system. (The above three sections were condensed from Nathan 1996, pp. 18-22.)

One of the unanticipated outcomes of the charter-school movement has been its appropriation in many places by groups of parents who have sought to create essentially "public private schools": environments that conform to rather traditional educational philosophies but allow parents to shield their children from what they perceive to be a public school system dangerously out of control.

Such groups of parents are well-organized and sophisticated in their knowledge of their legal rights. They quickly learn the workings of the educational bureaucracy and are able to exploit it to gain permission to create a school that is not particularly innovative, but is consistent with the beliefs of one group of parents. Such charters do not place much pressure on public schools to reform (since the charter duplicates many of the practices of the public schools that surround it), but they do allow some parents enhanced control over the children fortunate enough to be admitted to these "havens." A few of these schools have had difficulties as the religious agendas of some parents have spilled over into the school, but generally speaking these charters function quite effectively. They are testaments to the ways in which policies devised for one purpose can easily come to serve exactly the opposite purpose.

Several problems have beset charter schools: (1) lack of expertise in fiscal matters (some schools have closed due to lack of adequate fiscal controls or downright fraud); (2) inability to meet state health and safety requirements for school buildings; (3) internal turbulence over governance issues; (4) failure to address the startup costs of a school such as the costs for a library and computers; and (5) inadequate planning for the complexity of starting a school, resulting in schools that open without texts or a clearly defined curriculum.

The charter-school movement generally has yet to face the consequences of the first real disaster: a tragedy such as an injury to a student in a school-sponsored trip where a volunteer is driving irresponsibly, a sexual offense by a teacher or volunteer or community-resource person, or an exposé by a local television station showing poor sanitation or dangerous practices at a charter. While the public schools have become (unfortunately) accustomed to such disasters, charters have yet to experience them in earnest. These periodic incidents shake the public's trust in public schooling. The effect on the embryonic charter-school movement of an event that causes the public to question its faith in these schools is yet to be determined. It may engender a backlash against deregulation of schooling.

An early example of this type of incident is a case in Arizona, one of the most "hands-off" charter states, where the Arizona State school board revoked the charter for Citizen 2000, a Phoenix K-8 school with a multicultural philosophy. The school's owner had filed for bankruptcy. The school had been having administrative and financial problems since the state auditor general concluded that the school's accounting structure and fiscal controls were "practically nonexistent, which is a matter of grave concern" (Schnaiberg 1996). The state's investigation focused on the possible misuse of public funds. Advocates of charters defended the movement generally. The executive director of the Arizona Charter Schools Association, John R. Kakritz, stated that "schools have been failing for years and they stay open. The failure of a school being connected with its closing only strengthens the movement" (Schnaiberg1996). The accuracy of this observation remains to be confirmed.

There is obvious danger in allowing publicly funded and sanctioned schools to reflect dramatically different beliefs and values through their instructional programs. As decentralized as American education has been, it has retained a common core of practices and values that have contributed to a sense of nation (while simultaneously ignoring the contributions of large groups of Americans). A key challenge will be to see whether charter schools will operate within the mainstream of the American value system to the degree that taxpayers will not object to their monies going to support the education that takes place in those schools while at the same time these schools will satisfy the needs of those organizing the charter. An additional challenge will be to see if such a system can be reconciled with the traditional collective-bargaining model of labor-management relations present in most districts.

SCHOOL CHOICE: THE ULTIMATE CHANGE IN GOVERNANCE

The next step along the continuum of decentralization and restructured governance of public education is school choice that extends beyond the public schools to include private and parochial schools, and, in some cases, home schooling. Choice can simply mean that parents can choose among educational settings within a school or school district. But the concept is more often interpreted to mean *vouchers*—an amount of money the state assigns to an individual student that the student can then take to any qualifying educational institution, instead of being restricted to a local school.

Vouchers could set the stage for the "privatization" of public education, the movement to a market system of schooling, where parents (and students) are "consumers" served by a number of vendors, ideally competing for their business, each vendor providing a high-quality alternative.

Chubb and Moe (1990, 1991) argue for the more radical and unrestricted forms of choice. On the basis of their studies of private schools, they conclude that schools outside the public system may perform better and that parents should have a chance to choose between the two.

They argue that market forces must be allowed to shape schools to a greater degree. "We believe that the fundamental causes of poor academic performance are not to be found in the schools, but rather in the institutions by which the schools have traditionally been governed" (Chubb and Moe 1991, p. 18).

They identify three basic issues that must be addressed for education to improve: the relationship between school organization and student achievement, the conditions that promote or inhibit desirable forms of organization, and how these conditions are affected by their institutional settings. The key to making schools effective lies in "unleashing the productive potential already present in the schools and their personnel. It rests with granting them the autonomy to do what they do best" (Chubb and Moe 1991, p. 20). This autonomy is achieved by freeing schools from external control, as embodied in the central bureaucracy, to the maximum extent possible.

Chubb and Moe argue not simply for site-based management in public schools, however. The forces of bureaucracy are too strong within any public educational system, they contend. The pressure of the marketplace is the only way to guarantee freedom from stifling bureaucracy. "The system [must be] built on decentralization, competition, and choice."

They challenge states to create a new system of public education based on the market principles of parental choice and school competition. The properties of that system are summarized below:

- The state sets minimum criteria and charters any group that can meet the minimum criteria.
- The state will monitor enrollment and distribute public monies accordingly.
- The system of school finance will continue to be determined and controlled by the state.
- Scholarships will be available for at-risk students to make them attractive clients.
- Each student can attend any chartered school, with state funding following the student.
- Every effort will be made to provide tax-supported transportation to all students who need it.
- The state will provide a Parent Information Center to help parents choose among schools.
- The application process to schools must be equitable.
- Each school must have complete autonomy to determine its governance structure and internal organizational structure.
- The state will hold schools accountable for meeting the criteria set out in their charters, and for adherence to applicable laws.
- The state will not hold schools accountable for student achievement or other dimensions that call for assessments of the quality of school performance. This is the function of the marketplace.

Several key issues appear time and time again in the policy debate. Martin (1991) contends legislators and policy-makers are "trading the known for the unknown" when they mandate programs of school choice. I have summarized below Martin's ten recommendations about choice programs, which express the concerns many educators and policymakers have regarding this approach.

1. *Choice programs must be well planned.* Careful attention must be paid both to family freedom as well as school improvement and educational equity.

2. *Choice programs must have equitable admission standards.* Quasi-private schools cannot be allowed to skim off the most easily-educated students, leaving the rest for the public system.

3. *Choice programs must inform parents of the ramifications of their choices.* Parent information programs must be developed with consideration of the social and economic background of the parents who will be receiving the information.

4. *Choice programs cannot guarantee that educational quality will increase.* There is no compelling evidence at this point to confirm that choice leads to better education.

5. *Choice programs must be but one part of the total reform process in education.* Overall issues of program quality and of community involvement in education must be addressed, rather than simply relying on choice to solve all educational problems.

6. *Choice programs must view the increasing racial diversity of America as a strength on which to build a world-class educational enterprise.* These programs cannot become vehicles for greater segregation and social sorting. They must actively promote the valuing of diversity if the nation is to survive.

7. *Choice programs must assure citizens their rightful role in the governance and accountability of educational programs.* Safeguards must be developed to guarantee parental involvement, even if parents are dispersed over a wide geographical area. Present protections, such as privacy laws and the civil rights of students, must be maintained.

8. *"Experimental" choice programs must begin collecting solid and hard evidence that will demonstrate their successes and failures so that the citizenry can learn from the experiments.* As the new initiatives being developed by state legislatures, the federal government, and private entrepreneurs begin to come on line, adequate requirements that they demonstrate the impact of these programs must be adopted and enforced.

9. *Developers of choice programs must confront the financial implications of greater options for parents and students.* Choice programs are not low-cost strategies for school improvement. Could the dollars being allocated to them be better spent to strengthen and improve the existing system, or develop a new one? The reality of the cost of choice must be acknowledged.

10. *Choices will be limited in a choice program.* There is a limit to the amount of information students and parents can and will process to make a choice. More options do not necessarily lead to better decisions beyond a certain point.

These caveats notwithstanding, policy-makers have not been shy about attempting programs of choice. Many states, including Minnesota, Wisconsin, and Massachusetts, have conducted limited experiments with choice. Nathan (1989) describes five basic types of school-choice plans where choice is limited to the public system: local, program development, specialty school, open enrollment, and postsecondary option.

Local: Plans offered by local public school districts include "magnets, schools within schools, and/or alternative programs from which families select" (p. 53). Numerous urban districts have developed magnet schools as a means by which to enhance choice and promote integration. Historically, however, some of these have tended to become elite through selective examination requirements. The challenge is to devise magnets that are able to compete successfully and that guarantee access to a wide range of students.

Program Development: In these plans, "states provide funds explicitly to help school districts plan and develop different kinds of public school options" (p. 53).

Specialty School: "Statewide or regional magnet schools, drawing from several districts, are funded by cooperating districts or directly from the state" (p. 53). Minnesota, Colorado, and Oregon have laws with provisions that offer students a second chance through area learning centers, second-chance sites, or alternative learning centers.

Open Enrollment: These plans allow students to "move across district lines under certain circumstances without permission of the district in which they live" (p. 53). Some districts, such as St. Louis and Milwaukee, use this as a strategy to promote desegregation within a metropolitan area. In other states, such as Massachusetts, this approach is being utilized as means to pressure districts to improve or face loss of students.

Postsecondary Options: Students taking advantage of these plans "may attend post-secondary programs with state and/or local funds paying their tuition and fees; families not in the district decide whether to participate" (p. 53). Minnesota, for example, allows public school juniors and seniors to attend colleges, universities, and vocational schools with state funds following them.

Boyer (1992), in a report sponsored by the Carnegie Foundation for the Advancement of Teaching, concludes that claims about the benefits of choice programs "greatly outdistance the evidence." The report, School Choice, states that 70 percent of parents with children in public school have no desire to send their children to any other school, public or private. One reason is the distances most students would have to travel to reach a school in a neighboring district. The survey found that in those states with choice programs, fewer than 2 percent of eligible parents are participating. The report concludes that parents tend to use these choice programs for other than academic reasons. No significant educational gains can be attributed to these programs at this time, the report states. Specifically, the limited Milwaukee experiment is pointed to as an example of a program that has not achieved the desired results:

> Most private schools involved in the program, which took effect in 1990, thus far have failed to report academic results—let alone demonstrate gains. And the small-scale experiment has failed to spark broader improvements in the school system (Olson, October 28, 1992, p. 12).

The report does find some more successful choice programs within school districts. These programs, which enable all children and parents to participate, help revitalize schools, empower teachers and principals, and stimulate parents to consider which program is best suited to their children. It mentions Montclair, New Jersey; Cambridge, Massachusetts; and District 4 in East Harlem, New York City, as examples.

Boyer recommends that choice be used to supplement, but not supplant, neighborhood schools, and he recommends the creation of choice within schools, as well. He offers the following recommendations for the development of effective choice programs:

- Programs should not be arbitrarily imposed. Parents must be actively engaged in the planning and be well informed about the alternatives available to them.
- Transportation must be provided to students who need it.
- No statewide choice program should be established until a series of essential requirements, such as equitable funding, have been met, and all existing programs should be held to the same standards. (Olson, October 28, 1992, p. 12)

Evidence regarding the effectiveness of the few moderate-scale choice experiments is mixed. Smith and Meier (1995), in an analysis of choice as a policy tool, conclude that "social science research has managed to muddy the waters of the [choice] debate with a string of contradictory reports." Witte (1992) reported no consistent improvement for low-income Milwaukee students who received vouchers to attend private schools. Additional yearly reports through 1995 reached the same conclusion. These results were challenged by Greene, Peterson, and Du, with Boeger and Frazier (August 1996), who found that students who continued for three or more years in the voucher program outperformed students who were denied entry into the voucher program and continued in the regular system. Discussing the research conducted on the Milwaukee voucher experiment, Christopher Jencks noted that more than 80 percent of the students attended one of three private schools. What the study essentially showed was that these three schools may be more effective than the Milwaukee public schools collectively (Olson, September 4, 1996).

New York City's East Harlem model of multiple schools within a converted high school has shown near-miraculous results according to those closely involved in its development (Fliegel and MacGuire 1993). Richmond, California's choice program was blamed for driving the district into bankruptcy. All of these experiments are on a limited scale and have yet to yield conclusive results.

Smith and Meier (1995) reach one conclusion about the effect on public-school achievement of the movement of students to private schools.

> We found that public school performance did not affect private enrollments. But... as private school enrollments rise, public school performance drops.
>
> Combined with our earlier research, this offers strong evidence that private schools "skim" the best students from the available enrollment pool. In other words, private school performance is likely to be a function more of enrolling the most educable students than of superior instruction or organizational structure. (p. 316)

In all likelihood, policy-makers will continue to consider more substantial programs of choice over the next several years. It appears equally likely that such proposals will appear on state ballots, as well. Their potential impact will be far-reaching, yet their effectiveness has yet to be demonstrated. Choice programs are appealing as simple solutions to the complex problems that face the educational system. It seems much easier simply to walk away from public schools than to attempt to redesign them so they are successful with all students. This tempting "curb appeal" of choice programs must be balanced against the realities that to date such programs have yet to demonstrate their benefit to a broad cross-section of students or to justify the appropriation of tax dollars to support nonpublic schools.

Nevertheless, public educators will have to be ready to explain why they should not be subject to the same type of competition prevalent in the rest of the economic system, and how they are offering appropriate choices within the existing system. At the very least, school districts should consider ways in which to accommodate those parents who wish a choice, either within their own school or the district at large. Some real options for students and some sense of responsiveness to the wishes of patrons will go a long way toward dispelling the image of school districts as bureaucratic dinosaurs incapable of adapting to the needs and expectations of its clients.

In the final analysis, the greatest impact on public schools from programs of choice may not come so much from the actual adoption of them as from the threat of adoption. This may provide more of a lever or motivator to cause teachers, administrators, and board members to look more seriously at the need to accommodate the desires of parents for greater control over their children's education, or at least the option to have some effect or influence on the way in which their children are educated. Choice (or the threat of choice) may be the external force that galvanizes some schools or districts to take action to improve their instructional programs and to think of parents and students as customers and clients who want their needs and goals to be considered to a greater degree than they are now. If programs of choice have this effect alone, they will have been a powerful influence on school restructuring.

DECENTRALIZATION: THE 'MAGIC BULLET' TO SCHOOL RESTRUCTURING?

All these strategies for changing governance have one common assumption: Decentralization of decision-making and responsibility will lead to improved academic achievement, whether such decentralization is in the form of a new structure of authority within the existing system (site-based decision-making) or a more radically decentralized education system (choice). It is an assumption that resonates well with policymakers, who look at the private sector (and even traditionally noncompetitive sectors of the economy such as medicine) and see examples of the decentralization and competition trends all around them.

In education, there is little evidence that wholesale decentralization for its own sake will necessarily or automatically lead to improved learning outcomes. What is absent from almost every plan for decentralizing decision-making is a concomitant increase in accountability to accompany enhanced authority to make decisions. Such accountability is critical to making decentralization work.

Decentralization of authority without accountability to produce some agreed-upon, observable results can cause problems if those who make the decisions focus on personal agendas and quality-of-teacher-worklife issues. To date, all the decentralization models have had great difficulty developing appropriate accountability measures and systems. This is important, since the decentralization formula has two parts—increased authority to make decisions and increased accountability to improve learning. Advocates seem quite willing to accept the added authority but perhaps more reticent to assume responsibility for demonstrating enhanced student learning.

In the private sector, decentralization can be linked to clear results, generally expressed as "the bottom line." Such clarity is seldom present in education. There are many possible ways to increase accountability, particularly once a state, district, or school agrees upon the outcomes and assessments that will be employed to gauge student learning. Accountability in such an environment directly relates decisions made by adults to the effects such decisions have on children's learning. If the decisions are having no effect or a negative effect, there is little reason to allow such an educational environment to function without scrutiny or intervention. If, on the other hand, a school is showing success, there is a strong rationale to enhance its method of decision-making, or certainly to refrain from intervening in governance issues.

Kirst (1991) notes that "school-based management is often seen as equivalent to restructuring, rather than a component of the overall plan." Malen and Ogawa's (1988) study of site councils in Salt Lake City schools indicates that even though highly favorable arrangements existed to help ensure the success of these councils, "teachers and parents did not wield significant influence on significant issues in [key] decision areas." A report on the Boston school-based-management plan concludes that "school-based management in Boston has not significantly altered instruction and has not shifted real authority to the schools" (Olson, September 25, 1991). In other words, simply creating new decision-making structures is no guarantee of restructuring. Involvement in decision-making can be an important component of a comprehensive strategy to help students succeed, but it is only one component.

Success, it should be noted, must be defined differently for each school. There is a "value added" aspect of education that is not captured well by a blind comparison of test scores. The performance of a school in an affluent neighborhood with strong parental support and a rich experience base for students might better be compared, at least on some important dimensions, with other similar schools rather than with all schools. Likewise, schools with large numbers of students who require additional resources or pose unique challenges can make a case to be compared with other schools with similar student populations, and with their own performance over time, in addition to performance in relation to the norm. Such comparisons, however, do not in any way imply acceptance of the disparities between schools for the rich and schools for the poor. The comparisons are merely an additional tool to understand all schools better and to improve their performance by identifying effective practices and consistently poor performers. These comparisons allow the effects of decision-making to be gauged more accurately. Such principles apply both to strategies of participatory decision-making present in public schools and to programs of choice outside the public schools.

There is little evidence that decentralization as the first (or only) element in a program of school restructuring is a successful strategy. Decentralization and involvement without focus, agreement on desirable results, vision, and clear accountability to improve learning are unlikely to succeed as the sole strategy to restructure education. Changes in governance may be critical to restructuring when they occur along with other activities designed to enhance student learning, and when they function to support this goal. In other words, changes in governance appear to hold the greatest promise as means to ends, not ends in themselves.

CHAPTER 18

TEACHER AND PRINCIPAL LEADERSHIP

As noted in chapter 6, the principal's and teacher's roles are likely to change in significant ways if restructuring occurs. Changes implied in the literature on restructuring include greater responsibilities for teachers and greater decision-making authority over a range of factors affecting the teaching-learning process. Principals will have to be adept at managing continuous-improvement processes and enlisting teacher, parent, and community support for change.

In short, the success of most strategies for restructuring assumes or requires a new type of leadership for professional educators. Teachers are expected to take on more decision-making responsibility both inside and outside the classroom, as well as to demonstrate the ability to shape instruction and the learning environment in many important ways. Principals are expected to facilitate and support teachers as they exercise authority to make decisions that improve student learning.

The implications of such changes, both for the culture of schools and the role of teacher and principal, are profound. Professionalism implies a "client-oriented and knowledge-based" view of practice (Darling-Hammond 1990), which may not be the norm in many schools currently. Moving from a bureaucratic to a professional conception of teachers and principals requires schools to change their views of "the nature of learning, the characteristics of learners, and the requirements for effective teaching" (Darling-Hammond 1990, p. 27). This is unlikely to happen without changes in the leadership roles teachers and principals exercise within schools.

This chapter explores the rationale for greater teacher leadership, complementary changes in principal leadership, some of the implications of such role changes, examples of ways in which school districts are creating new leadership roles for teachers, and the ways in which principals are exercising new leadership styles that support restructuring.

WHY DEVELOP TEACHER LEADERSHIP?

Development of teacher leadership, like any other activity or program initiated to restructure schools, should have a clear goal and purpose related ultimately to student learning outcomes. New teacher roles or titles should not be created simply as morale-boosters or "feel good" activities that serve primarily as ends in themselves.

There are many valid reasons for pursuing teacher leadership as a component of a strategy for school restructuring. The current literature on school improvement and restructuring is replete with calls for teacher empowerment and leadership. Some advocate teacher leadership as a means to achieve greater application of democratic principles of participation (Bolin 1989; Lieberman, February 1988; Louis 1992; Schmuck and Schmuck 1992), to enhance teacher satisfaction (McClure 1988), to build professionalism (Moses and Whitaker 1990; Brandt, May 1989), to increase the capacity for organizational change (Maeroff, March 1988), and even to improve the efficiency of schools (Darling-Hammond 1990).

Smylie (1995) summarizes some of the more prevalent approaches to enhancing teacher leadership:

> The most visible opportunities for teacher leadership have come from now familiar forms of work redesign—career ladders; lead, master, and mentor teacher roles; and participative decision making. By the late 1980s, nearly every state had adopted or was studying some variation of these programs. District initiatives have proliferated beyond count. More recently, other opportunities for teacher leadership have arisen through programs of curricular and instructional innovation, new approaches to teacher preservice and in-service education, and the development of new school structures and professional communities. (pp. 3-4)

Smylie also mentions the primary objectives of the effort to give teachers more opportunities for leadership:

> Efforts to develop teacher leadership generally aim to achieve three related objectives. First, they seek to enhance the quality of the teacher workforce by expanding and diversifying the nature of teachers' work, providing a wider array of incentives to attract and retain the most talented teachers in the profession. Second, they intend to establish new incentives, controls, and opportunities for professional learning and development aimed to improve the performance of practicing teachers. Third, these efforts seek to enhance the institutional capacity and performance of schools by placing teachers in positions of leadership and decision making, thereby increasing resources and expertise available for improvement. (pp. 3-4)

Hart (1995) suggests that teacher leadership challenges the traditional views of school leadership that a modern school faces. The heroic vision of the school leader is obsolete for two reasons: a modern school faces more complex problems and challenges than yesteryear's schools did, and today's teachers are more able to solve problems for themselves and to participate in decisions and school improvement. Teacher leadership has been a hallmark of many education-reform policies, says Hart, who notes five purposes for teacher-leadership programs:

> Some new work designs promote teacher leadership to further a more democratic, communal, or communitarian social system for schools and schooling....
>
> A second purpose for implementing teacher leadership structures touted in reform literature is to draw on teachers' expertise and experience as a school resource (Griffin, 1995; Heller and Firestone, 1995)....
>
> Work design and incentives drive a third purpose of teacher leadership opportunities. In order to recruit, retain, and motivate the *best teachers*, proponents argue, these teachers' work values should guide the redesign of teachers' career opportunities (Hart, 1994; Hart and Murphy, 1990; Kim, 1993)....
>
> An acknowledged need for instructional and curriculum reform motivates a fourth purpose of teacher leadership roles in schools. Enthusiasts assert that teachers will make or break any serious attempts to reform instruction and curriculum. With their leadership, new techniques and approaches that fundamentally redesign teachers' work will be more likely to take hold and persist (Heller and Firestone, 1995)....
>
> Finally, teacher leadership structures seek to promote a more professional work environment (Little, 1995). (pp. 10-11, emphasis in original)

Development of teacher leadership can be thought of as having the potential to address these goals and others. However, teacher leadership might be most valuable as a means to enhance the professional growth and development of teachers, and as a means to revitalize their teaching and their interactions with their colleagues in ways that enhance student learning and increase the capacity of the school to adapt and improve.

Devaney (1987) offers insight into teachers' perceptions of their motivation and satisfaction; in the following paragraphs, she summarizes research on the importance of professional development for teachers:

> During 1985 Milbrey W. McLaughlin and her colleagues at Stanford University conducted in-depth interviews of 85 San Francisco Bay Area teachers of widely diverse experience and work settings, both elementary and secondary. They sought teachers' testimony on the sources of satisfaction and effectiveness in their work. One of the things they found out is that "the central career concern for teachers is professional development, not promotion." Sylvia Yee, one of the researchers writes: "... For a majority of teachers, career development resides not in external advancement structures, but in opportunities for professional development."

> When they speak about professional development, Yee says, teachers value not the typical school district inservice training, but rather "getting teachers to come together and share ideas and thoughts" in informal but rigorous ways over extended periods of time— "a combination of sharing information, observing other teachers, offering and receiving collegial feedback, and cooperative problem solving...."
>
> Rosenholtz writes [that] three factors—"task autonomy," certainty about their capability to help students learn, and learning opportunities for themselves—are strongly linked to teachers' intent to stay in teaching.
>
> Rosenholtz also identified factors in the organization and management of those schools in which teachers said they had many and varied opportunities to learn to improve their work. The conditions that characterize a "learning enriched" school, she found, are "deliberate, collaborative goal setting" by the principal and the faculty together; teacher evaluation that gives frequent situation-specific feedback on the basis of clear criteria developed with teachers; teachers' agreement with each other about what is important in teaching; and collaboration among teachers—"the ease with which teachers request and offer advice and assistance to colleagues." (pp. 9-11)

Teacher-leadership opportunities can be powerful motivators for teachers if they are not linked explicitly to external structures that might imply promotion, such as career ladders or administrative positions. Little's (1990) examination of the "mentoring phenomenon" indicates the difficulties teachers face when they and their duties as mentors are perceived to be external to the school, rather than an integral part of it:

> Ambiguity and conflict surrounding role definition have been greatest where mentor roles remain unlinked to any larger picture, where norms are unfavorable to professional growth or career mobility, and where teachers have been left to "invent their roles as they went along."

Devaney (1987) mentions the norms that prevail within teaching (norms of conformity, competition, scarcity, isolation, and egalitarianism), the power these norms have as constraints on teacher behavior, and how teacher leaders can violate these norms, either inadvertently or deliberately. Most schools have cultures where teachers are united by their sense of personal powerlessness. They react by demonstrating a "proletarian solidarity against authority" (Devaney 1987). Tacit agreements regarding competition and performance exist so that no one "stands out" to threaten other teachers. In fact, some teachers known for their excellence will shun public recognition for fear of offending their peers. Scarcity norms evidence themselves in the reaction aroused when one teacher gains access to resources not available to all teachers. A release day, a computer, or additional supplies given to one teacher, however deserving, can create tension. Isolation is perhaps the most deeply ingrained norm in public education. In some districts isolation is formally institutionalized through contracts that require administrators to receive advance permission from teachers before entering their classrooms. Programs of teacher leadership frequently confront and challenge these norms.

There have been two basic schools of thought regarding approaches to the creation of teacher-leadership roles. One has focused on developing formal programs such as mentor teachers or career ladders. An advantage of these programs is that they have institutional legitimacy and, frequently, resources in the form of time and money attached to them. They have the disadvantage of not being adaptable to the unique needs of a school, and of failing to capitalize on the skills, interests, and personalities of staff members within a building. They may also have problems achieving legitimacy with teachers, who may not have been involved in their design or may not agree with the selection criteria or the ways in which the criteria are applied. Sometimes such formal programs are successful, but in other cases they are not. Little (1990) estimates that the mentor relationship in the California Mentor Teacher Program "appears to fail at least as often as it succeeds."

An alternative is to develop teacher leadership on an ad hoc basis. This method identifies interests and abilities of staff members and matches them with the leadership needs of the school. Training and resources are then tailored to the development of the individual. Legitimacy is enhanced if others already view the person as competent in the area where he or she is assigned leadership responsibilities (Little 1988). Devaney (1987) calls this the "light socket" approach to creation of leadership positions. It opens up a wide variety of roles, limited only by the needs of the school and the abilities of the staff.

There is evidence that principals in schools that are having some success restructuring are creating the conditions within which the traditional norms of teaching can be challenged and altered and diverse teacher-leadership roles can be created. Teachers link their personal and professional development with the restructuring process. This combination can be a powerful motivator for teacher involvement in organizational change (Goldman, Dunlap, and Conley 1991). Clearly the "light socket" approach has limitations, since it is dependent on a supportive principal and a culture within the school that allows or supports teacher participation in leadership roles, whereas externally imposed programs can get around these factors. On the other hand, the externally imposed programs encounter severe difficulty when they are implemented into hostile environments. Therefore, the creation of teacher-leadership opportunities may well depend in nearly all cases on the conditions present in individual school buildings.

CREATING A RANGE OF OPTIONS FOR TEACHER LEADERSHIP

This section discusses the types of roles for teachers that might be available within a school as vehicles for the development of their leadership. It suggests a combination of the two methods discussed previously. Some of the leadership options are more formal programs that generally exist in a framework broader than the individual school; many more are merely opportunities that can be presented to or developed with individuals or small groups of teachers. In combination, these options offer a broad range of leadership-development opportunities that can infuse the school culture and be available to all teachers in some form or another.

There seems to be an assumption in many schools that leadership cannot be exercised until someone has been a teacher for a long time. When less-experienced teachers attempt to exert leadership, the reaction is often less than overwhelmingly positive. This norm tends to discourage teachers early in their careers from developing their leadership abilities, or at least it dissuades them from viewing leadership as something integral to the role of teacher.

An alternative is to develop teachers' leadership systematically throughout their careers. Teachers can experience different types of leadership at different points in their careers. The following examples serve to illustrate the types of roles in which teachers might be involved over time:

Club sponsor/coach/student-leadership advisor. New teachers frequently have responsibilities that they demonstrate in working with students. Rarely is this considered a form of teacher leadership or a forum for the development of the neophyte teacher's leadership skills. This is a missed opportunity to develop future teacher leaders.

Protégé to a mentor. While the leadership implications may not be immediately apparent, they become clearer if it is understood that by understanding the protégé role, the teacher is better able to understand the mentor role. Additionally, the protégé's leadership skills can be encouraged and developed by the mentor. Someone who has been mentored becomes a stronger candidate to serve as a successful mentor to someone in the next generation of teachers. (For a more detailed discussion of the protégé's role, see Krupp 1987.)

Peer observer/peer coach. All teachers could conceivably benefit from this role throughout their careers, though it may be of most value earlier in the career path, since it helps teachers to learn to accept and value help from colleagues and to communicate with other teachers about problems of practice. These roles provide many opportunities for substantive conversations about teaching, and they help alleviate the norms of privacy and conformity. In addition, many well-developed programs already exist and are available to be implemented. (For a discussion of peer coaching, see: Anastos and Ancowitz 1987, Garmston 1987, Hall and McKeen 1989, Joyce and Showers 1987, Munro and Elliott 1987, Phillips and Glickman 1991, Servatius and Young 1985, Showers 1984.)

Chair or member of committee or site council. There are numerous ad hoc and standing committees in school districts and buildings. Participation is often seen as a duty (or punishment). In addition, many states have mandated or districts have developed site councils as a dimension of decentralized decision-making. If these committees or councils begin to have genuine power, and if teachers are well matched to roles and are provided adequate training, such work can provide opportunities for teachers to develop and apply new skills in relatively controlled situations. As they gain experience, participants can grow into more formal leadership roles, such as chairing a committee or council. Assuming such roles also allows teachers to begin to develop broader perspectives on the organization—and their role in the organization—and to experience differing conceptions of power. As teachers become empowered to a greater degree, they begin to perceive their ability to influence the conditions of teaching. Leadership in this sense serves both to increase job satisfaction and to improve learning outcomes.

Department (or division) chair/coordinator. The organizational structure of secondary schools in particular is beginning to change in some schools. They are moving from traditional discipline-based departments to divisions or houses or teams, sometimes interdisciplinary in nature. At the same time, the role of department chair is also changing. The traditional role of department chair has rarely been seen as a way to develop teacher leadership. Rather, people in these positions often were expected to take a conserving posture—make certain their department did not lose resources or the principal did not do anything detrimental to them. Many of the tasks were clerical in nature.

The reshaping of the role of department chair holds great potential for creating new leadership opportunities. Since most secondary schools already commit resources to this role, it is one of the few existing legitimized leadership roles for teachers. This level of leadership can be a natural next step, in many cases, for teachers who have been leading ad hoc school-improvement efforts and committees. However, for them to succeed, the duties of the department chair will need to contain a greater emphasis on school improvement and restructuring, curriculum improvement, instructional quality, and interdisciplinary relations. The people in these roles can have a significant impact on instructional practice if they are given appropriate skills and support (Acheson and Smith 1986). The expectations for the department chair should be considered in relation to the resources (in the form of release time or stipend) already devoted to it. Schools may want to ask the question: Are we getting our money's worth—in school improvement and teacher-leadership development—from this role in return for the leadership and services being provided for it?

Lead teacher. Devaney (1987) proposes a new role—that of lead teacher. This leadership role is tied much more closely to teachers' perceived needs and is designed to help them fulfill those needs. Lead teachers are neither administrators nor classroom teachers. While they retain their ties to the classroom, they are freed part-time to assist in the professional growth of their colleagues and to coordinate decision-making among a subgroup of the faculty. The lead teacher provides teachers with the following services:

- More time to prepare for and attend to individual students' unique learning needs
- More frequent, practical feedback—both affirmation and correction—on teaching technique and classroom organization and management
- Immediate, constructive help for teaching problems
- More relevant and stimulating opportunities for professional improvement—from observations of each others' teaching within the school to instruction provided outside
- Informal, continuing exchanges with other teachers about what they have learned from experience as well as new information they have garnered, and about new materials or projects they can develop together for their own classrooms or for the whole school
- A voice in the school's organization, course of study, school day, schedule, budget, student policies, and plans for improvement (p. 16)

Berry and Ginsberg (1990) present a similar argument for lead teachers and suggest that, "like the manager of managers in other professional organizations, the lead teacher will guide and influence the activities of other teachers and serve as a catalyst for the decisions other teachers make that affect student performance most directly" (p. 618). They see the creation of lead teachers as a bargain of sorts:

> In exchange for even greater regulation of *teachers* through more rigorous and more professional teacher preparation, certification, and selection procedures, there will be less regulation of *teaching*. Policy makers will generate fewer rules regarding what is to be taught, how it is to be taught, and when it is to be taught. In essence, all professions whose members

> must use discretion and judgment in meeting the unique needs of clients have struck such a bargain with society: the profession guarantees the competence of its members in exchange for retaining its control over the structure of work and the standards of practice. (p. 618, emphasis in original)

Berry and Ginsberg acknowledge that there is some risk in creating differentiated roles among teachers, but they believe such differentiation can be legitimated "if the working environment provides frequent opportunities for cooperation and interaction between lead teachers and their teams." They believe that lead teachers should have a more active and direct role in improving instruction. Lead teachers should be engaged in:

1. classroom teaching
2. mentoring and coaching other teachers
3. appraising the performance of other teachers
4. professional development
5. peer reviews of school practice
6. building-level decision making (p. 618)

Lead teachers might be employed at all levels, but elementary schools (and middle-level schools that have instituted interdisciplinary teams) seem more likely to utilize this role.

Association representative. Rarely are the leaders of the teachers' association or the building representatives of the association seen as potential leaders, yet they can influence a faculty toward embracing or rejecting any given proposal and can set the tone for the building. Administrators might be well advised to attempt to understand what needs this role fulfills for the people who occupy it.

There is no reason why the leadership skills of these people should not be developed systematically. If association representatives have good communication skills, know how to apply techniques for dispute resolution, understand the processes of school improvement and change, and have a broader picture of the organization and their role in it, they are only likely to use these skills in a fashion that encourages interaction between the association and the administration. They may also become interested in other leadership positions; if so, they may be more equipped than most other teachers to fill those roles in a competent manner. When teachers can move between leadership roles in the association and in the school, feelings of disenfranchisement and alienation can be alleviated.

Teacher researcher. Some teachers have no desire to lead anyone else or to be involved in a committee. They may, however, be willing to contribute to school improvement and restructuring efforts by gathering data about particular school practices. Some cynical teachers can be enticed (or challenged) to contribute by examining their beliefs about education (for example, statements made at faculty meetings: "the parents don't support us"; "all the kids have jobs and can't do homework"; "we give kids every chance to succeed"; "the halls are out of control"). These teachers can be commissioned to collect data to prove or disprove the stated hypothesis. This type of research does not require extensive methodological training, but merely a commitment to intellectual honesty combined with appropriate data collection and analysis techniques. Such information also has high credibility with faculties, since it is collected within the school by peers. (For a discussion of teacher as researcher, see, for example, Bracey 1991, Sagor 1991.)

Staff developer. Since the early eighties, the number of teachers who have assumed some staff-development duties has skyrocketed. This movement grew initially through the efforts of Madeline Hunter and those who have been trained to teach her materials. Subsequently a number of others such as David and Roger Johnson (cooperative learning) and Bernice McCarthy (learning styles) developed "training of trainer" programs to accompany their materials and training on specific instructional techniques. Many teachers became staff developers to teach "Elements of Instruction," cooperative learning, or learning styles to other teachers.

Since the initial work of Hunter, the role of teacher as staff developer has become much more complex. Many who began as instructional trainers have since become more like organization-development consultants, assisting the change process within a school or building. Still others organize peer-coaching and collegial-sharing activities. This role is appealing and revitalizing for many teachers at midcareer; it has been implemented in numerous forms by districts throughout the country.

Teachers can serve in at least two kinds of roles as staff developers. One is the inbuilding staff developer, who helps teachers implement techniques learned from experts while continuing to teach part-time. This teacher is released from teaching for a fixed time. The other is the staff-development consultant, who works with teachers from many different buildings and has expertise and training in a variety of areas and techniques. The staff-development consultant often retains the status of teacher and does not become an administrator. Titles such as Teacher on Special Assignment signify the unique status of the role. It is a role whose status can be ambiguous, particularly in cases where these people work closely with administrators in the planning of staff-development activities and in the implementation of particular instructional programs. In such cases, they may come to be seen as "quasi-administrators."

Noble (1987) describes some of the issues that arise when teachers are taken from the classroom and given the larger, more liberating perspective on teaching, learning, and schooling that the role of staff-development trainer offers:

> Teachers who serve as staff development trainers are usually enthusiastic, dedicated learners themselves, whose attitudes toward growth make them strong, positive models for their students. Yet, if our experiences in Greece are typical, these strong teachers may be the very ones who will then be drawn away from classrooms as a result of their involvement in staff development. Does this mean that we shouldn't let good teachers become an integral part of the staff development training process because they may be on an inexorable course *away* from direct student contact? We have no definitive answer, only impressions and ideas....
>
> First, teachers who also serve as staff development trainers could be encouraged to have the "best of both worlds" by lightening their class loads or by making them part-time teachers, perhaps using job sharing strategies. A second idea, perhaps the one with the strongest implications for job satisfaction on both fronts, is to capitalize on the teacher/trainers' strengths in their own buildings. As trainers in a program to increase effective instruction who are also skilled in clinical supervision, teachers could have the unique opportunity to also take the role of coaches to their schools' principals. By serving as a "peer" observer and coach, the trainer can help bring about real change and improvement in the principals' instructional supervision skills. (p. 31, emphasis in original)

(For a more detailed discussion of this role, see: Bertani and others 1987, Leggett and Hoyle 1987, Marks 1983, Moye and Rodgers 1987, Tallerico 1987, Wu 1987.)

Curriculum developer. Teachers have traditionally implemented curriculum, not developed it. They have developed activities to support curriculum that has been developed elsewhere, or written objectives against which curriculum adoptions can be judged, but the curriculum itself was the product of a publisher or a large curriculum-development operation, such as a university project. With the advent of information technologies such as CD-ROM, video, and electronic databases and networks, teachers can gather enough information to be able to assemble a sophisticated curriculum program in a relatively short time. By using scanners, desktop-publishing programs, and laser printers, they can quickly produce sophisticated products. Even the cost of mastering custom CD-ROM disks is not beyond the means of most districts.

What teachers lack most is training in curriculum development as a conceptual task and the time to work on such projects. If teachers are provided training, time (available in the summer), and access to technology, they will be able to produce high-quality curriculum in much less time and for less cost than is currently the case. If school restructuring succeeds in effecting change in the core functions of teaching, this kind of internal curriculum development will become more prevalent in school districts.

Educational entrepreneur. To break the bounds of conformity, and to encourage free thinkers to remain in education, new leadership roles, such as educational entrepreneur, can be developed. The educational entrepreneur experiments with new techniques, develops new programs, taps new markets, and develops new relationships inside and outside the school. Many schools restrict this type of activity to special student populations, believing such approaches are fine with at-risk or special-education students, but are not appropriate for the general student body.

Educational entrepreneurs need to have institutional authorization to compete with the traditional system, to put pressure on the rest of the school to equal their performance and results. Rather than being seen as fringe players, these innovators could be placed in positions where their efforts could be modeled and emulated by other, more cautious mainstream teachers.

Reflective practitioner. No school moves very far without someone with a vision, a sense of what could be. This vision has to be developed somewhere, and it has to be spread throughout the school via some mechanism. The role of reflective practitioner is one that may be sought after by teachers who like to dream, explore, imagine, analyze. Teachers in this role lead discussions of books and articles, take the data generated by the teacher researchers and consider implications for the school, or question basic assumptions and practices in the school. They provide leadership and support for new ideas and promote examination of existing assumptions.

Schön (1989) describes this process as reflection-in-action, the ability of professionals to analyze and "self-correct" while engaged in the act of teaching. It requires teachers to be highly aware of the processes of teaching, to be capable of observing what is occurring and of analyzing what they observe or conclude. They also need to be able to reflect upon their reflection-in-action:

> There are times—when people get stuck and want to get unstuck, or want to help someone else learn to do something, or want to build on their own spontaneous artistry—when people also reflect *on* their reflection-in-action. Then people become observers of their own on-the-spot experiments, reflect on what they observe, and try to describe their knowing, their inquiry, and their change in view. They give themselves reason and try to make explicit the reason*ing* they have produced without having had to take thought. (Schön, pp. 204-5, emphasis in original)

Sullivan (1987) describes a program designed to increase the amount of professional reading and discussion in which staff at a pilot site engaged. Release time from classes was provided for thirteen teachers to engage in conversations with one another and with faculty from a local university along with state educational leaders. Coverage of classes was obtained by having university faculty alternate between substituting for the teachers one month, then participating in the discussions the next.

The experience appeared to be particularly valuable for beginning teachers, but also served as a tool for building collegiality among all participants. There were indications that the seminars led to enhanced educational practices in classrooms. Teachers occupied a variety of leadership roles throughout the process. Beginning teachers were able to interact as peers with their more experienced colleagues. The tone of faculty meetings became more professional. Teachers, through enhanced professional knowledge and interaction, came to exert more leadership and act in more professional ways. (For additional discussion of this role, see: Schön 1989, 1988, and 1983.)

Administrative intern. Administration is another avenue for teacher leadership. Many teachers are unsure of their interest in an administrative position and need an opportunity to assume the role briefly, in a controlled manner, to determine if they are truly interested in pursuing full-time administrative positions. Such internships may be brief (1-3 days of shadowing, attending meetings with the administrator, and so forth) or extended (an entire year in which the intern is in charge in the administrator's absence). They may be coordinated with an administrative certification program or independent of such a program. Such opportunities may require limited release time or be accomplished on the teacher's own time. Many more opportunities of this nature can be made available to teachers within existing budgets and administrative structures.

Mentor. Teachers can serve as mentors at almost any point after they have mastered the art, craft, and science of teaching. Usually if this is going to occur, it occurs somewhere between five and ten years into a teacher's career. The role of mentor has been studied in some depth (Galvez-Hjornevik 1986, Gray and Gray 1985, Huffman and Leak 1986, Kram 1983, Little 1990, Stroble and Cooper 1988, Zimpher and Rieger 1988, Krupp 1987). The conclusions, in general, are that this relationship can be valuable, but it is not automatically so. Mentor relationships need to evolve, and there needs to be a good match between mentor and protégé in terms of personality styles. In schools where a culture of growth and support is created—where norms of isolation, conformity, and egalitarianism are not overbearing—mentor relationships can flourish. Where these norms are dominating, it is difficult for one teacher to offer support and advice to another.

Teacher leadership, as conceived in this chapter, is multidimensional, encompassing various roles and activities throughout a career. The intent is not to limit the definition of leadership to administrative responsibilities. New conceptions of power require new theories of leadership, for teachers and administrators. Anything teachers can do to facilitate change and improvement in ways in which they interact with their colleagues has the potential for being a leadership role. The more opportunities of this nature teachers have, the more potential a school has to become a "learning organization" (Senge 1990) with the internal capacity to take control of its improvement and evolution.

THE PRINCIPAL AS FACILITATIVE LEADER

Contemporary scholars (Dunlap and Goldman 1991; Dunlap and Goldman 1990; Dunlap and Goldman 1989; Goldman and Dunlap 1990; Goldman, Dunlap, and Conley 1991, 1993; Leithwood 1992; Prestine 1991; Peterson 1989; Kleine-Kracht 1993) have observed an emerging style of principal leadership characterized by high faculty involvement in and ownership of decisions, management of the school's vision, and emphasis on significant change and improvement. They have reached the conclusion that new terminology is needed to describe the evolution of the principalship in the face of school restructuring, school-based decision-making, and teacher empowerment.

Educational reformers have begun to develop a vision of schools as more fluid, adaptive, and cooperative environments, creating a new set of demands for teachers and principals who must work together for change to occur. In this section I explore the extension and evolution of the conception of principal as instructional leader, from an emphasis on mastery of multiple technical skills to the management of the energy flow within a school.

I use the term *facilitative leadership* to describe how principals come to lead without dominating. The following ten "propositions" for describing facilitative leadership in practice* were derived from research conducted by me and my colleague Paul Goldman from 1991 to 1993 in nine Oregon schools that were members of the Oregon Network, a federally funded grant designed to enable schools to take the "next step" in school restructuring.* What these schools—three elementary schools, two middle schools, three high schools, and one K-12 alternative learning center—shared was the attempt by their administrators to employ more facilitative forms of leadership as a means to effect school restructuring.

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* This section is adapted from D. Conley, and P. Goldman, "Ten Propositions for Facilitative Leadership." In *Reshaping the Principalship: Insights from Transformational Reform Efforts*, edited by Joseph Murphy and Karen Seashore Louis. 237-62. Newbury Park, California: Corwin Press, 1994.

Each of the following propositions includes a brief discussion of its meaning and possible implications. These propositions help identify the strengths and limitations of the concept of facilitative leadership. Furthermore, these propositions help identify and describe changes in the interaction among various organizational and system functions that result from altered conceptions of leadership and changed leadership behaviors. When principals employ facilitative leadership to help schools achieve their vision, certain tensions occur.

The ten propositions are grouped under three broad headings: Creating and Managing Meaning, Facilitating the Process, and Operating in an Organizational Context.

CREATING AND MANAGING MEANING

1. Facilitative leadership is primarily the creation and management of tensions.

All organizations contain tensions, and all successful leaders must be able to manage those tensions. The principals we studied seemed to accept tension-creation and management as defining dimensions of their role. Rather than simply reacting to organizational and environmental forces, they anticipated and directed energy in ways that caused staff to engage more in processes that could lead toward improved schooling. Directed tension-creation may help create a clear focus on common goals, standards for success, and accountability for performance.

These principals did not simply establish a vision for the school, then step back and expect the school to align its efforts to achieve the vision. Their efforts to engage and direct faculty energy were highly purposive, at times creating conflict, or bringing it out into the open, rather than suppressing or sublimating it.

One elementary principal used a series of retreats to focus staff discussion on "ten commitments" that she believed were prerequisites to schoolwide change. These conversations were difficult. One staff member, in particular, felt he would not be able to meet the new, higher

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expectations to which the staff was committing. His public displays of emotion regarding his fears and sense of inadequacy challenged the principal and faculty to deal with the complex interplay between supporting a colleague and improving their program to meet the changing needs of students.

In one school, the staff could agree in principle to change, but could never agree on any specific program. The principal worked to manage the tensions between his "pioneer" teachers, who needed to move forward, and his "settlers," who were comfortable where they were, even though they might acknowledge change (in the abstract) as desirable. He attempted to validate the pioneers without segregating them from the rest of the staff, so that their ideas would continue to influence others. They were, however, frustrated that the principal could not (or would not) move more decisively to get the rest of the faculty to act.

The principal tried a number of approaches designed to increase gradually the settlers' acceptance of the inevitability (and desirability) of change. As a result of a series of meetings the principal helped organize and support, all faculty agreed that the school would adopt a "research and development" process whereby new ideas and programs could be implemented and evaluated. This strategy enabled the pioneers to continue their efforts, while the settlers had to acknowledge that change would result from these activities. The effect was to create tension in a way that it could be managed toward ends the faculty had agreed were desirable.

2. Successful facilitative leadership encourages shared visions. But there are tensions and tradeoffs that accompany the shift from bureaucracy-driven to vision-driven systems.

"Vision" has been a much discussed and admired component of school restructuring (Bredeson 1991, Conley and others 1992, Fullan with Stiegelbauer 1991). The linkage between a vision-driven organization and facilitative leadership can disrupt both the bureaucratic structures and existing culture of a school. Bureaucratic mechanisms generally provide a sense of order and security, but they also tend to undermine the members' belief that they are capable of solving their own problems or modifying their work environment to make it more effective.

In six Network schools where site councils or school-improvement committees were observed, participants were initially skeptical that their decisions or input would be respected. The actions of the principal helped overcome this skepticism and build confidence in and commitment to teacher-led decision-making and problem-solving.

Where schools have strong visions, participants may decide to disregard bureaucratic safeguards in order to pursue agreed-upon aims, but this creates uncertainty and anxiety for those accustomed to operating within constrained work environments. Often frustration is symptomatic of insecurity among those members of the school who have been most successful playing under the old, known, predictable rules and value system.

Vision-driven systems allocate opportunities and influence to those able to operationalize the vision. Both the principal and new teacher-led decision-making structures will likely be more sympathetic to staff who can put ideas into practice. Those who previously had special access to the principal must compete for scarce resources publicly with others who may be more able to adapt practices to the new vision. This competition and resource shift can induce previously powerful or influential staff members to resist the dismantling of bureaucratic structures and mechanisms.

In one Network school the principal made the budget available for public review. All major budget decisions were made by a committee of teachers and administrators. The process was open, and the principal could no longer be suspected of using the budget to promote his agenda (or vision) independently. When decision-making becomes more public, transactional leadership is constrained, and so are those who function best utilizing "squeaky wheel" tactics. Such behaviors are less successful when decisions are made publicly and where critics are expected to demonstrate how their criticism helps the organization achieve its goals.

In facilitative environments, policies and procedures do not necessarily dominate and control behavior, since staff members are more free to be opportunistic and can create and communicate their own meanings to one another. This free-wheeling environment creates substantial disorientation for many teachers who want little part of the ambiguity that results. One superintendent described leadership in this situation as attempting to coax caged birds to fly (Mitchell 1990)

Ironically, sharing decision-making can be most problematic for principals who have developed strong, clear personal educational visions. Two Network principals mentioned the difficulty of "letting go" of, or modifying, their personal vision. It was clearly very difficult for these principals to give up ownership of deeply held beliefs. When asked how they reconciled their vision to the group's ability to define a collective vision, they indicated they did many things to ensure the vision that emerged was one with which they could live.

Part of the task of facilitative leadership is to negotiate the potential conflicts between staff and self in ways that allow continued modeling of the "shared" vision by the leader. In at least one Network school, the principal's vision was primarily intuitive, and the staff, not he, articulated a clear, focused vision. Meaning was negotiated and renegotiated more frequently when the principal was not the primary interpreter of the vision.

3. Facilitative leadership, together with vision, generates and capitalizes on opportunities. But if not monitored and facilitated systematically, this opportunism can lead to fragmentation and factionalization.

Vision-driven schools encourage individual innovation. They can also become fragmented and factionalized. Legitimated by the vision, any teacher can take the initiative to solve problems and develop programs. Such individual initiative can help schools to adapt more rapidly and to build a culture where change is an accepted value. It can also lead to deepened rifts between those with the strongest commitment to the vision and those with lesser attachment to it.

Multiple initiatives, even if consistent with one another and with the school vision, create obligations and expectations that stretch both the collective energies of and fragile relationships among staff. Successful facilitative leaders work to manage this fragmentation. They support those teachers who are ready and eager to change, while trying to increase commitment and blunt criticism from those who have not yet responded positively to the new vision.

Principals described the energetic teachers who took advantage of the opportunities offered by a vision-driven environment as "thoroughbreds," "pioneers," and "early adapters," and tended to give them the greater leeway they needed. These teachers would run beyond the vision, pushing its limits and causing it to be redefined or to be operationalized more quickly. But their initiative, and the administrative support they received, also stretched building norms and sometimes created a backlash. The fact that their initiatives were vision-driven and sanctioned by a site committee did not erase the dominant scarcity norm: While teachers may have accepted having little themselves, professional jealously did occur when some received resources, opportunities, or recognition. Moreover, some teachers initiated projects requiring collaboration. Such activities threatened longstanding and powerful norms of teacher isolation, as well.

At least one principal was careful to ensure that every teacher had a role in restructuring activities during the year, which helped close the isolation gap. One significant project was a conference at the school that attracted several hundred teachers. All staff members were validated as having contributed to the vision, and as being innovative educators. The effect of this inclusiveness seemed to be a greater openness among faculty to one another's ideas, and a decreased defensiveness toward or fear of the accomplishments or ideas of colleagues. The conference helped manage factionalism by promoting involvement and positive interdependence among all staff.

FACILITATING THE PROCESS

4. Successful facilitative leadership requires constant development of many new leaders and creation of new leadership structures. However, the creation of new leaders and structures upsets the existing social hierarchy.

Principals who had the greatest success employing facilitative leadership to bring about changes in the school were those who fostered the development of leadership among a wide range of teachers. This leadership often came from people who had never given any indication of being either interested in or capable of taking a prominent leadership role.

In one school, leadership arose around technology, which was central to the school's vision. One teacher with significant knowledge of technology had evidenced little interest in or aptitude toward leadership. At a goal-setting retreat he established a mini-electronic network that enabled participants to work more effectively in a new, interconnected manner. The teacher's expertise was validated, he personally contributed to the effectiveness of the retreat, and he was subsequently viewed as more of a resource for reform efforts. He went on to design an electronic presentation that explained the school's restructuring program. This led to his frequent role as spokesperson for the school, as he teamed with colleagues to make presentations. His commitment to change was strengthened, as was his role as a leader.

Principals also developed new leadership by tapping teachers who had been previously excluded, sometimes because of their status. This might be a younger teacher, a veteran teacher who had quietly withdrawn in reaction to unsupportive colleagues, someone new to the school, or, in high schools, women who had not been previously included in "the conversation."

In her study of three Network schools, Rusch (1992) concluded that "participatory practices in schools disrupt[ed] traditional hierarchies of power and influence and create[d] new tensions among staff members" (p. v). Muncey and McQuillan (1993) noted a similar phenomenon in their study of the Coalition of Essential Schools.

There was a profusion of new governance structures and ad hoc committees at these schools, some of which were cumbersome, confusing, and ineffectual. However, the new structures and committees had two significant consequences: (1) they allowed many more teachers to develop leadership skills, and (2) they provided some alternatives to long-time governance structures without engaging in the costly political battles that often accompany the outright dismantling of an existing structure.

Facilitative leadership by principals seemed to produce facilitative behaviors by teacher leaders (Goldman and others 1993). Teachers who took advantage of new leadership opportunities tended to involve others, rather than accrue personal power.

There was less fear of being shut out of important decisions, or of needing to guard one's resources. The breakdown of isolation that occurred when many teachers interacted regularly and took leadership roles both reduced fears and presented many more forums for concerns to be raised. New leadership roles and structures were tools to solve problems, not merely maintain the status quo.

5. In facilitative environments, principals span internal and external boundaries by nurturing communication and information exchange, and by identifying and exploiting opportunities.

As power devolves within a facilitative environment, decision-making and information flow become more complex. More people make more decisions and take more initiative. Principals link internal groups, keeping them informed of one another's progress, checking on the overall climate in the building, supporting new ideas, floating trial balloons, and working informally to develop consensus. These activities are especially critical in preparing staff to make decisions that require a strong faculty majority.

Facilitative principals span external boundaries as well, securing resources for the school, initiating contacts, legitimizing the school's change efforts with the community, sensing opposition and potentially controversial areas, and identifying opportunities of many kinds.

Oregon Network principals were not necessarily overtly political in that they did not focus on accumulating personal political power either among their fellow administrators or within the community's power structure. They worked more to procure "raw materials" for the school in the form of money, equipment, human resources, opportunities, and ideas. It was typical to hear one of these principals say, "We have a great opportunity to..." in describing a contact she or he had recently made. They made certain they were somewhat free from the daily management of the school to be "out and about," making contacts, meeting with people, and exploring possibilities. Where these principals were successful in spanning boundaries, creating opportunities, and securing resources, few complaints regarding their absences from campus were heard.

The principal's entrepreneurial efforts may be imitated by staff members, as they too become more openly entrepreneurial and attempt to secure resources or develop programs that span organizational boundaries. Schools with facilitative environments seem especially able to exploit the educational (and occasionally financial) benefits of partnerships. But in the Network schools this sometimes led to situations where the principal did not always know everything that was going on, every contact that was being initiated, or the status of every program within the building. These principals seemed to be comfortable with this ambiguity.

However, the potential always existed for someone in this expanded pool of leaders to overstep the bounds of authority and make unauthorized commitments. In one case, a well-meaning parent did just this, making arrangements with a local business to host a fundraising event designed to help support the school's reform program. The principal received a call from an executive in the company who was disturbed that the school had not followed proper procedures in requesting the use of facilities.

In another example, a teacher who had become accustomed to solving problems on her own initiative invited a local professor to serve as a consultant to a district-level task force. She called back several hours later to put the invitation on hold, after it occurred to her that she did not have the authority to obligate district money.

6. Facilitative leaders understand the importance of creating readiness for change. Principals continue to play a pivotal role in deciding when to act, since total readiness is never achieved.

One consistent theme that emerged while studying the Oregon Network principals was their role in creating readiness for change in their buildings. They listened carefully and observed frequently so they could regularly assess the staff's willingness to change and determine how to motivate staff to build the psychological framework necessary for large-scale personal change.

Most of the principals we observed used a variety of formal and informal strategies to build readiness. Professional conferences and visits to other school sites served as important tools to expose more teachers to new ideas. Generally teams would consist of a carefully selected blend of true believers, fence-sitters, and skeptics. These teams were frequently charged with synthesizing the information they were receiving, and planning how they would report to the faculty on their findings. They took their job of finding and analyzing best practices seriously, since they believed their recommendations would be carefully reviewed and could eventually be implemented by their colleagues. This also enhanced group solidarity and allowed them to appreciate one another's point of view.

Some of these principals also read voraciously; others did not appear to do so. However, in nearly every case they valued articles, books, and other sources of relevant written material, whether discovered by them or brought to their attention by staff, and either copied the best of the materials or alerted staff to their availability. Principals found ways to create discussion and share ideas within the faculty to enhance the sense of intellectual ferment, and to challenge staff members who held more static world views.

These principals used data to help make decision-making more inclusive. One high school had a well-developed set of data that was very easy to read and contained information to which the staff could refer as they considered what improvements were needed next. With these kinds of materials at hand, it became both easier and more logical to turn decision-making over to teachers. Significantly, in this school, teachers came to expect to have data available to make decisions, and tended to demand data if they were not already provided. Staff expected new programs to collect data to determine effectiveness and to make midcourse corrections.

Attention to readiness did not necessarily eliminate conflict once it was time to act. Facilitative principals were still called upon to move the change agenda forward when further readiness activities were unlikely to yield results. Knowing when continued pursuit of readiness would be only marginally useful was more an artistic than scientific decision for these principals. They could not always articulate how they knew when to encourage action. When pressed, they said they followed their instincts. It should also be noted that their instincts were not infallible.

7. Successful facilitative leaders balance process and product, activity and action. An excessive emphasis on process as an end in itself can become dangerously addictive.

Principals in Network schools understood the value of process. All utilized retreats, ad hoc task forces or committees, early release days, and other mechanisms by which they found the time to involve all faculty in discussion, dialogue, analysis, and planning. Most used outside consultants to intervene at times. Consultants made presentations, reviewed plans, resolved conflicts, recommended new structures, gathered data, facilitated group goal-setting, and taught others to do these tasks.

Teachers in these schools commented on the value of these processes, of having the time to talk with one another, to get the "big picture," to think, dream, analyze, design. Many came to enjoy the spirited interchange that often accompanied such activities. These processes themselves were valuable "products" in and of themselves; they helped establish an environment within which it was possible to initiate substantive change.

Almost all the principals we studied were skilled in moving beyond process to product. They established the importance of action as well as activity. The net effect was to raise the level of concern and interest surrounding most "processes," such as planning or goal-setting. This gave any process they employed meaning and value, since participants were convinced something would result from it. Everyone wanted to be involved and to contribute.

The schools developed mechanisms to communicate and examine their visions and goals regularly. Most had some form of retreat, either on- or off-site, once or twice a year, combined with opportunities throughout the year for extended discussion among groups of staff members. These sessions allowed for the creation, clarification, and recalibration of shared meaning. There was an almost palpable sense of expectation that accompanied retreats, work groups, study committees, and other settings charged with making recommendations. Those involved took their work seriously. It was the principal who helped establish these norms and expectations, and followed through by implementing decisions or recommendations that resulted.

The schools we studied all employed some form of consensus in their decision-making. However, both the forms and the underlying definition of consensus varied greatly from site to site. The successful principals seemed able to shift the purpose of consensus from reaction to action. Consensus was employed primarily to affirm decisions and agreements already negotiated through a variety of mechanisms. But in a few schools, the consensus requirement served primarily as a blocking mechanism.

In several of the Network schools, consensus had symbolic as well as political import, serving as the means by which faculty affirmed decisions already reached in committees or informal interactions. This need for extensive informal involvement and continued modification of major change proposals resulted in slow movement initially. But once an agreement was affirmed through consensus, the school was able to move more consistently and relatively quickly. Agreement was more likely to be permanent than perfunctory.

However, the commitment to consensus led at times to inaction or worse in at least one school where the principal felt it was manipulative to lobby informally or negotiate before decisions were made by the faculty as a whole. A group of teachers realized this principled position enabled them to block any proposal by simply refusing to participate prior to the final decision. Therefore, they did not engage in informal negotiations or modifications of major proposals. There were no mechanisms to force their involvement, or to require them to take responsibility for their actions. They simply waited for the call to consensus, then refused to agree.

The principal recognized the problem and started over. First he got agreement on a new definition and new rules of consensus. Then he made sure all staff were surveyed and interviewed by teacher leaders before important decisions were made. He helped teachers organize "key communicator" networks. Supporters could then talk with resistors before it was necessary to confront one another in public. He, however, continued to remain somewhat aloof. But these communication efforts benefited from the institutional legitimacy the principal's support gave them, and the revised decision-making process changed the dynamic between those centrally involved in change and those who were not.

8. There may be value to reinventing the wheel when it creates ownership of an idea. However, there is limited energy available. Facilitative leaders make careful choices regarding how this energy is expended.

As we have noted above, Network educators attended many regional and national meetings, and they read extensively. They frequently brought back ideas or concepts that allowed (or caused) the faculty to create their own meaning or program. However, there was only a finite amount of time and energy available for staff to adapt ideas or develop programs. Principals had to know how to walk a fine line between adopting or adapting someone else's ideas and developing programs or structures from scratch.

In one elementary school the principal organized a two-day session of teachers and community members to develop outcome statements in literacy and numeracy. These statements were to serve as frameworks by which the staff could come to understand outcome-based education. Participants examined and even used outcomes already developed by other districts and states, but synthesized and reconceptualized them in a unique fashion.

These activities occurred at the same time the state department of education was attempting to define statewide outcomes. Many schools had decided to wait and simply adopt the state's final product. This principal, however, felt that her staff would comprehend outcomes much more completely, take ownership of them, and transform their teaching to a much greater degree if they first developed their own statements, then compared them to the state's product. The two days devoted to developing outcomes were not much more than other districts would have to allocate to explaining the state's outcomes to their staffs, but the ownership and understanding that resulted at this school would enable staff to understand and adapt state outcomes relatively easily.

Such positive results alert us to a dilemma. Facilitative leaders use judgment to help the staff decide when and where they should reinvent the wheel, and when and where they should take advantage of existing ideas, packages, curricula, and so forth. When do the leader's decisions reflect those of the group, and when do they clarify conflicting priorities? Network principals made relatively few mistakes identifying school-site development projects. This success helped staff maintain a willingness to explore and adapt new ideas and programs.

OPERATING WITHIN AN ORGANIZATIONAL CONTEXT

9. Unresolved questions relating to accountability continue to surround facilitative leadership as a method for making decisions and solving problems for which parents, school boards, and community members expect someone to be responsible.

The principals in our studies had not resolved accountability issues in any systematic manner. This should be a matter of some concern when considering facilitative leadership and the emerging role of the facilitative principal. In these schools, policies, goals, and procedures are being decided by faculty or committees, but principals remain responsible for their implementation. This potential conflict of authority and responsibility has, so far, not been problematic. There appear to be several possible reasons for this.

First, all the decisions faculty have made are ones the principals have been able to support. No principal was put in the position of being asked to do something she or he felt was fundamentally bad for children, or for the school. One principal was implementing a discipline and tardy-prevention system he believed treated only symptoms, not causes, but he felt obligated to implement it, since it resulted from one of the faculty's first applications of a new consensus process. He planned to collect data on the effectiveness of this system, compare it to the previous system, and share this information with faculty when appropriate. In this way he hoped to change their attitude over time.

Second, no decision involved a radical departure from existing practice, and all schools were showing improvement (or no decline) on traditional measures of success. One high school decided to move to four ninety-minute periods a day and to require all students to demonstrate mastery of certain core skills before being allowed to move to the next level of the program. An elementary school reorganized into "tribes" of one-hundred students and four teachers grades 1-5. While potentially controversial, such adaptations were comprehensible to the community and consistent with less dramatic changes the school had initiated previously. Dropout rates were stable to declining at all high schools; one school had the highest standardized-achievement-test scores in the state; several others won state and national awards and recognition.

Third, these districts held principals accountable almost exclusively for managing schools, not for improving education or achieving goals. Since all the principals (save one) were highly effective managers, they were able to proceed with little interference or accountability. This is likely to change in states, such as Oregon, that are requiring much more detailed and public reporting of school goals, student performance, attendance and dropout data, and other indicators of educational productivity and effectiveness.

As educational-accountability demands increase, so will the pressure on the principal to be responsible for the performance of the school. This will have interesting implications for facilitative leaders. It is worth adding parenthetically that there is little evidence to suggest that highly directive leaders will be any more successful in achieving the types of improvement necessary to satisfy the public in many communities. Facilitative leadership may offer the best hope; however, issues of accountability must be addressed in ways they have not been to date.

10. Facilitative leadership is still the exception in many school districts. Facilitative leaders need support to sustain their efforts and counteract isolation.

The focus of the propositions up to this point has been on the behavior of principals in the context of their school building. However, one of the most consistent frustrations these principals had was their feeling of isolation, both as facilitative leaders and change agents, within their school districts. Many indicated they did not feel supported by either the central administration or fellow principals, and could point to evidence that their efforts were being undermined at times.

Issues of leadership transition underscore the fact that the Network schools all exist in a broader organizational context. They are vulnerable at transition points if the district administration does not understand or value this type of leadership.

One school with a tradition of shared decision-making had four principals in four years. Each year the staff was forced to start anew with principals who did not necessarily understand or value facilitative leadership. This constant readjustment was made all the more difficult because teachers were not involved in the selection process.

This particular school had great difficulty sustaining a common vision over time. Staff members had gained recognition and attention because of a set of structural changes (innovative schedule, students grouped into learning teams) they had made several years before. Each successive new principal wanted to roll back one or more of these structures, as a way of putting his "mark" on the school. These principal behaviors may have been designed to demonstrate who was in charge, to send a message to teachers accustomed to being involved in decisions and solving problems. They indicated the central administration's apparent lack of understanding or appreciation of the fragility of facilitative leadership.

This lack of organizational support highlights one of the contradictions of decentralized decision-making. While central administration works tentatively to devolve authority, some schools move very rapidly to enable staff members to take control of their professional environment and begin its transformation. Just as the pioneers within some schools may be perceived as threats, so may some facilitative principals be viewed with suspicion by their fellow administrators.

Schools that are able to move toward distinctive responses and adaptations develop what we have referred to elsewhere as *nonstandardized solutions* (Goldman and others 1993). Such solutions result in schools beginning to look different one from the other. While districts may have adopted the rhetoric of decentralized decision-making, there is still difficulty accepting schools that look different and affirming change models that involve many teachers and community members. This should not be surprising, since such approaches threaten the traditional role of central administrators.

Network principals frequently found themselves caught between worlds. They were expected to bring about change and improvement, but were viewed with suspicion by their supervisors or peers when they "gave away" too much authority or power to staff. It should be noted that there were fellow administrators in each district who did support these facilitative principals; sometimes it was even the superintendent. However, the organizational culture as a whole did not necessarily support their efforts, which made it more difficult for them to feel part of the school district or to share their successes and frustrations openly.

These principals repeatedly expressed the value of the support network that a group of like-minded colleagues provided them. They brought teams of teachers, parents, and support staff to Network retreats. They sought out one another socially and professionally. It was not unusual for high school staff to visit an elementary school in another district where they would learn about a technique such as portfolio assessment. Elementary principals felt comfortable interacting with middle school and high school principals. Their common link was their belief that staff should be involved in and have ownership of decisions that affected their capacity to teach effectively.

DISTINGUISHING FACTORS OF FACILITATIVE LEADERSHIP

What distinguishes these schools from their neighbors? Perhaps the key difference is a heightened sense that all staff are both obligated and able to take control of their professional lives and work environment, that they can and must make a difference in their school. The importance and potential power of this attitude have been noted elsewhere (Rosenholtz 1991).

When facilitative leadership is successful, most members of the organization seem to hold a different psychological perspective on their responsibility to participate in solutions and on their capacity to solve problems. Teachers, classified staff, and even parents and students expect to be the ones who identify problems, suggest solutions, and take the responsibility to improve the conditions and products of their school. This occurs not as much through political transactions as through negotiated shared meaning and values that provide a framework for individual and collective action. Principals mediate this process so that all the participants feel they are capable of creating the conditions necessary for improved individual and collective performance.

This world view stands in sharp contrast to schools where staff and community alike are cynical and frustrated, where they look upon leaders primarily as scapegoats or objects of blame or derision, and where the solution to any problem is always beyond their reach or ability to influence. Unfortunately, this portrayal seems to describe far too many schools. This profound sense of inability to affect one's work environment may result from a combination of several mitigating factors, including highly directive or political styles of leadership; rigid bureaucratic structures; diffuse accountability for performance; and contradictory educational policies that isolate and fragment teaching and learning, thereby creating dependencies on the formal leader.

I have not used the word or concept *empower* in this chapter because I take this to mean someone granting power to someone else. This is not the concept I have sought to communicate. Instead, I have described environments where power and leadership are shared, where participants would tend to reject the notion of "empowerment" as inadequate and excessively narrow as a description of their relationship to power and influence in the school.

This distinction between granting and sharing power is subtle and may be difficult to grasp by many who are moving to involve more people in decision-making. It is an important one, since it goes to the heart of one's conception of power. Hallinger, Murphy, and Hausman (1991) and Bredeson (1991) both observed the difficulty principals experienced as they viewed role change. Specifically, principals were worried about losing control, giving up power. The notion of "giving up," which is implied by empowerment, may be very threatening to those who view power as an entity they are being compelled to transfer to others.

Incremental shifts of power may in fact be more difficult for many administrators to accept than a new conception of their relationship to power. Facilitative notions of leadership require a "letting go" of the illusion of control and an increasing belief that others can and will function independently and successfully within a common framework of expectations and accountability.

Empowerment often focuses on the negotiation of formal roles, structures, and procedures. While such issues must be addressed in any organization, a primary concern with governance, not improvement, may take considerations of power more toward issues related to working conditions of adults than student performance and teacher efficacy. Formal structures exist to constrain abuses of power, and to the degree such constraint is needed within an organization, these structures serve a useful purpose. However, the creation of these structures does not necessarily add to the organization's capacity to adapt and improve its practices.

Facilitative leadership does not seem to have as its primary purpose the enhancement of workplace democracy as an end in itself. Its focus in practice is on improved performance of the work group and enhanced learning by students. This focus on improvement rather than governance appears to be one of the defining elements of this type of leadership. There is less concern with developing and refining governance structures than with moving the organization forward, enhancing adaptability, solving problems, improving results. Issues of power are processed through the lens of organizational effectiveness and student needs.

Broad-based participation is achieved through a variety of strategies, one of which may be formal democratic structures.

Is facilitative leadership the answer to all of a school's problems? Can this style of leadership be practiced by everyone? Is it realistic to expect all schools to function in this manner? The answer to these questions is probably no. There are times in the life of some organizations when highly directive leadership may be both necessary and desirable, at least for a time. It also appears likely that many principals will not be able to reshape so radically beliefs and behaviors developed over the course of a career. Some communities may not be capable of exercising shared leadership without abusing the rights of the minority and the disenfranchised. Some principals may confuse facilitative leadership with laissez-faire leadership. The concept and practice of facilitative leadership continues to have many unanswered questions and potential problems.

At the same time, there is evidence that truly exceptional things can happen in environments where facilitative leadership is exercised. And many more schools and leaders may be challenged to perform exceptionally during the period of rapid adaptation in which public education is currently engaged. Facilitative leadership contributes to the capacity of schools to meet this challenge.

SHARED LEADERSHIP: THE NEW CONCEPT

Changes in teacher and principal leadership will have to take place simultaneously. It will not be possible to develop teacher leadership within schools where the principal remains autocratic. Nor is it feasible for a facilitative principal to achieve success in environments where teachers do not develop their own leadership abilities and actively participate in the process of reshaping their school.

The interactive nature of leadership development is often overlooked as schools focus on one or another dimension of restructuring. Several studies confirm this conclusion, including Heller and Firestone (1995), Louis and Miles (1990), Short and Greer (1993), and McCarthy and Still (1993). Hart (1995) cites Blau (1964) to make the point that the exercise of power and leadership is complex and unique:

> As Blau (1964, p. 17) cautioned 3 decades ago, "There are fundamental differences between the dynamics of power in a collective situation and the power of one individual over another." Collective enterprises like schools involve interactive influence processes, beliefs, effort, knowledge, and communication. Multidirectional, interactive, and adjustive approaches to leadership provide a more authentic map for planning and development in

> education (Lindblom, 1993; Smith and Peterson, 1988), and they support and affirm, rather than dilute, the effects of leaders in schools.

Leaders in restructuring schools are beginning to recognize these facets of leadership and to work more collaboratively to assist each other in the mutual development of leadership skills for use in bringing about change and improvement.

CHAPTER 19

PERSONNEL

Who is qualified to teach? What combination of human resources is necessary to maximize student learning? These two questions are of central importance to schools undergoing restructuring.

Traditionally, the only person deemed capable of teaching a class has been an adult with a teaching certificate. This definition is being reexamined. At the same time, the ways in which adults are used to support the education of young people are also being reconsidered. The use of support staff and paraprofessionals is being refined and expanded. More flexible ways of contracting for services are already in place in many districts. The roles of counselors, special-education teachers, Title I teachers, teachers of the gifted and talented, and those involved in other pullout programs, along with administrators, are being rethought in an effort to provide more support to those students who need it. The skills of adults outside the school are also being utilized.

These potential areas of change—in the definition of *teacher*, the role of support staff, and the use of a wider range of adults to instruct—are politically volatile, yet necessary to confront, given the labor-intensive nature of education.

Along the same lines, the performance expectations of teachers and the necessity that essentially all teachers must be able to meet the more demanding needs of today's students require an overhaul of the hiring and evaluation procedures employed with nontenured teachers. The teachers coming in to education over the next few years will need to adapt rapidly throughout the course of their careers to a changing profession, a changing student population, and a changing social context for education. This chapter examines changes in personnel practices, beginning with a reconsideration of the role of the certified teacher as the sole legitimate source of student learning.

CREATING NEW DEFINITIONS OF TEACHER

As teaching becomes more professional in nature, and as teachers acquire new responsibilities and skills required by their changing roles, it becomes increasingly necessary to examine the assumption that the certified teacher is the only person in the school building capable of teaching students. As long as teaching is defined as something that can only be done by someone with a certificate, little progress will be made in dealing with the "twin towers" present in most teacher-contract negotiations—higher salaries and lower class sizes. It is clear that with the present resource base it will be impossible to make significant progress on both issues simultaneously.

Orland and Cohen (1995) studied school financing patterns from 1970 to 1994. They concluded that "per-pupil education spending in all states grew substantially in real terms between 1970 and 1992." During this time, much of the increase was used to improve teacher salaries and to reduce class size, both costly items. Their report did not hold much hope that salaries could continue to increase and class size could continue to decrease at the same rate they have over the twenty-two-year period of their study:

> Our findings suggest that growth in per-pupil education spending is unlikely to continue at its 1970-to-1992 rates. The principal factors associated with strong spending increases since 1970 (i.e., economic growth and declining school enrollments) are changing. Economic projections anticipate generally lower levels of economic growth in the years ahead. Demographic forecasts predict school enrollment increases in most states. In addition, greater demands on state and local budgets can be expected from other government service sectors as a consequence of reduced federal financing. Such conditions will make it exceedingly difficult for most states to continue making per-pupil education increases comparable to those of the past two decades. Recent spending data from 1990 to 1994 reveal that a marked slowdown has probably already begun. (p. 3)

However, it may be possible to continue to increase salaries and reduce class size if the roles and responsibilities of school personnel are reexamined, and if state policies and regulations are modified. This can occur only if all parties make sincere efforts to rethink the rules governing who is allowed to teach students and in what capacities.

Shanker (1990) discusses the difficulty of solving education's problems solely by raising teachers' salaries:

> Our schools need to add several thousand dollars to each teacher's salary to begin to bridge the gap between the education "industry" and the private sector. However, it takes only quick calculations to demonstrate that this is not likely to happen. Since we have 2.2 million teachers, every thousand dollar increase means a $2.2 billion increase in the nationwide education budget. If we took an average competitive professional salary to be about $35,000, and added pension and Social Security costs, we would face a staggering $30 billion beyond what we now spend for education. The

> largest federal education program, Chapter 1, has an annual budget of about $3 billion. Therefore, when we speak of increases to make teachers' salaries competitive with other professions, we're talking about a huge sum that is unlikely to be allocated to just one item in the overall education budget....
>
> ... Here's the bottom line: Though the reform movement has brought about significant and long-delayed improvements in teachers' salaries, it is unlikely that the new levels alone will offer sufficient incentives to enable us to restaff our schools as they are now structured with the caliber and quantity of candidates that we need for the twenty-first century. (p. 357)

Shanker continues by discussing the other solution offered by many—lower class size:

> In short, a substantial reform of class size would still leave us with slightly better but essentially not very good working conditions, and, most important, probably no significant change in education quality.
>
> ... [T]he numbers just don't add up for such an improvement. A 20 percent cut in class size would mean an equal increase in staff and education budget—a huge and utterly unrealistic increase for one item. And if, by some magic, the money were there, it is unlikely that we could begin to find that number of extra teachers because of the demographic facts of life. (p. 358)

How, then, should educational reform and improvement be approached if increased teacher salaries and reduced class sizes are not the solution? Shanker suggests that part of the solution lies in greater flexibility in the staffing of schools:

> In a restructured school, teachers will need to be able to call on paraprofessionals, undergraduate "interns," and/or peer tutors. Our schools will need to form alliances with private industry that can "lend-out" short-term staff, particularly in such shortage areas as math and the sciences. We will have to explore a variety of staffing strategies if we want to break away from the rigidity of the prevailing system. (p. 360)

It might be considered unusual that the president of the second-largest teachers' union would advocate allowing more noncertified people to work with children in schools, but Shanker explains that there is little choice (cited in Sparks 1991). The existing pool of certified teachers would simply not be large enough to meet the demand if large-scale educational improvement is carried out. Enhanced career options for many groups, particularly women, have caused a decrease in the number of talented people choosing education as a career. This trend is not likely to change, particularly given demographic trends that suggest a shortage in college-educated workers generally by the late 1990s.

Shanker describes potential roles that may be created in schools and how these positions would affect teacher salary and class size:

> There might be more adults, but they wouldn't all be called teachers. We could use something like a hospital model in which we might have roles comparable to that of nurse, technician, general practitioner, specialist, and so forth. There would be more adults in the schools, but only some of them would earn more money. The salary issue will not be solved unless we have a different staffing structure.... That's also true of class size.... The same thing is true with trying to provide teachers more time for professional growth.
>
> All of this means that the only way we can realize the traditional aspirations of teachers and their unions and professional associations is by moving to staff differentiation, team teaching, the use of technology, and other things like that. (cited in Sparks 1991, p. 3)

In Wisconsin, for example, a wide-ranging report containing many proposals for school improvement suggested permitting school districts to obtain waivers to allow them to hire "teachers in private practice" ("Thompson Endorses Hiring Private-Practice Teachers," February 13, 1991). The waivers would give schools greater flexibility in staffing to meet student needs better.

Many states experimented with alternative routes to certification and with the use of noncertified teachers throughout the 1980s in a series of programs. The issue in the 1990s may go beyond these early pilots to question at a more basic level exactly what it is that a certified teacher brings to the classroom that other adults do not, and how a variety of adults with different degrees of education, training, and specific knowledge can be employed to meet the needs of children in the most cost-effective manner possible.

NEW CONCEPTIONS OF THE PARAPROFESSIONAL'S ROLE

Public schools currently lack the type of salary and role differentiation present in some other professions. For example, there are roles and career paths for highly trained paraprofessionals in the medical and legal professions that are absent in education. Although the term *paraprofessional* is used by some school districts to refer to classroom aides, the roles to which it is applied are not comparable in terms of training and responsibility to paraprofessionals found in other fields. Restructuring may provide opportunities to experiment with a wider range of roles.

Some early experimentation has already occurred in Dade County, Florida, and Baltimore, Maryland, where Educational Alternatives Incorporated (EAI) secured contracts to manage public schools. Part of their plan involves using "instructional interns" in place of the traditional paraprofessionals. Schmidt (1992) describes the distinction between the two:

> The paraprofessionals... typically have high school diplomas and perhaps a few college credits, and work at union-negotiated wages starting at about $7 per hour and averaging about $10 per hour.
>
> The interns, on the other hand, are required to have college degrees, but need not have any experience in education. They are paid about $7 per hour, and receive no benefits. (p. 19)

Initial reactions by paraprofessionals were not positive to the idea that they would be replaced by more highly educated personnel who would be paid less. EAI planned to use the savings in cost to place an intern in each classroom. The assumption was that the intern is "far better prepared to help run a classroom" (Schmidt 1992) than the paraprofessionals, and that placing these interns within classrooms will have more of an impact on student learning than many of the tasks performed by paraprofessionals outside the classroom.

The EAI experiment ran into numerous problems and was eventually dropped by the Baltimore school system. The superintendent at the time attributed at least some of the problem to "disgruntled unions" (Schmidt 1994). The Baltimore experiment demonstrates, at the very least, the complexity and potential conflict associated with changes in personnel roles, titles, requirements, and compensation.

Conlin (1991) and Bradley (1990) describe how EAI applied its techniques at South Pointe Elementary School in Dade County, Florida. At South Pointe, many more adults with various degrees of training and skill are being matched with student needs. As a result, the school is meeting students' needs while simultaneously achieving greater economic efficiency. The goal is to lower pupil-teacher ratios in the range of 12-to-1 by pairing veteran teachers with more junior teachers who might be a trained paraprofessional or instructional intern, a recent graduate of a teacher-education program, or an intern from a local university. Under such a plan, traditional positions such as counselor and librarian are eliminated. Principals and lead teachers decide if the school wants specialists in fields such as music, art, and physical education, who are usually assigned to elementary schools, or whether those resources should go to reducing class size across the board by hiring more instructional interns.

For this strategy to succeed, school districts have to be committed to continuing the professional development of these employees. They might be among the first personnel to adopt new teaching strategies. It would be important to be able to move these paraprofessionals around much more easily than is possible with certified teachers, who often have protection in their contracts against forced transfer. The ability to move paraprofessionals within a district would give administrators the ability to concentrate resources in a particular area or school for a limited time to address particular problems. Paraprofessionals could help buildings with "unhealthy" cultures to develop new norms and procedures, and they could help invigorate veteran staff by offering support, energy, and enthusiasm.

This role might also serve as a training ground and screening mechanism for those interested in entering teaching. It would be possible to identify those with potential to become excellent teachers, and to encourage their development. The conferring of a teaching certificate could be based more on the demonstration of mastery of a complex set of skills and behaviors, rather than on completion of coursework and a structured field experience.

Haselkorn and Fideler (1996) cite data from the National Data Resource Center of the National Center for Education Statistics that calculates the total number of full-time and part-time teacher aides in all sectors of K-12 education at greater than 450,000. The national ratio of teachers to paraprofessionals is 5 to 1. Over 30 percent of teachers received some assistance from an aide in 1991 (National Education Association 1992).

Title I programs make extensive use of aides for a variety of reasons, including to increase language and ethnic diversity in schools, improve school-community relations, and save money (International Reading Association 1994).

In many districts and classrooms, aides have not progressed greatly from 1962, when a report labeled them "secretaries for teachers" (Turney 1962). However, in certain circumstances they already do essentially the same work as teachers with lesser pay. Special education and bilingual classrooms are examples of such situations.

As aides' responsibilities have increased in certain areas, while simultaneously stagnating in others, there has been a growing sense that the role of an aide should be reconceptualized. The term *paraeducator* has been coined as one way to define the responsibilities of paraprofessionals in a way that focuses on their support of learning, not necessarily of teachers.

School districts in states with burgeoning enrollments and increasing ethnic and linguistic diversity are the most likely to be in the lead expanding and redefining the role of the paraeducator, since paraeducators provide the largest and most available pool of potential candidates for future teaching positions. Paraeducators can successfully participate in teacher-education programs and become certified, thereby increasing the diversity of a district's teaching staff. Such programs create a form of career ladder within a district, and offer hope for paraeducators who wish to continue in the profession.

The importance of this potential pool increases when projections about the number of teachers that will be needed in the next decade are taken into consideration. It appears highly unlikely that teacher-preparation programs will be able to provide enough qualified candidates through traditional certification routes. Paraeducators will play an important role in the staffing of schools over the next decade. Districts that learn how to create a range of roles for noncertificated personnel will benefit in a number of ways simultaneously.

THE CHANGING ROLE OF CERTIFIED SUPPORT STAFF

The deployment of certified support personnel is an issue of increasing interest to educators involved in restructuring. While pupil-teacher ratios have gone down in absolute terms during the past twenty years, the ratio of students to teachers in regular classrooms has not decreased nearly as much. The overall decrease has been caused mostly by the addition of specialists who work with small numbers of children or who have no teaching responsibilities. This group includes counselors, special-education teachers, Title I teachers, talented and gifted personnel, and various teachers on special assignment in nonclassroom roles. These roles are especially vulnerable in times of budget cuts.

More and more schools are beginning to assess the effectiveness of the deployment of these professionals outside the classroom. Often there are governmental regulations that seem to block changes, and yet some schools are beginning to challenge these by integrating support staff into classrooms, or by reducing overall pupil-teacher ratios by assigning all certified staff some teaching responsibilities. This strategy has its dangers, particularly if careful thought is not given to the needs of special student populations. It has, however, in some cases led to lower class sizes in which the needs of all students can be addressed more directly, leading to improved student-learning outcomes for those students.

Central Park East Secondary School in New York is one example of a school that decided to concentrate all its resources on the basic literacy and socialization needs of its students. The school was able to reduce class sizes to more manageable levels by assigning responsibility for literacy and socialization issues in some form to all adults and by eliminating as many special or pullout programs as possible.

The role of counselors can be expected to change dramatically if curriculum and instruction change. The traditional counselor at the secondary level has become more of a "traffic cop" in some important respects than the advisor to students initially envisioned when the role was created and promoted. Counselors often are relegated to making schedule changes, checking students into and out of classes and school, dealing with transcripts, writing letters of recommendation for the college-bound, and, in some schools, serving in an ill-defined quasi-administrative capacity. The preeminence of these tasks is a source of frustration for both the counselor and other teachers in the school, who may not understand what value the counselor is contributing to the school.

As students become ever more needy of support and intervention by school personnel, some counselors have already begun to offer services such as support groups and referrals to social-service agencies. If high schools reorient their programs around career pathways and put much more emphasis on applied learning, teachers and mentors will become more important advisors to the students regarding their career choices. Counselors will have to learn how to support this process and ensure students are not being shunted into careers based on ethnic, class, or gender stereotypes, for example. They will become "facilitators of facilitators," helping teachers in ways the teachers need, such as with connections to the community. Counselors may come to work more closely with schools-within-schools or career pathways, becoming much more familiar with a group of students, teachers, parents, and community members.

Many of the traditional duties of record-keeping may be relegated to technology. Parent volunteers, for example, can help students with many computer-based systems of career advising, college application, and scholarship and financial-aid searching. As more of this type of information moves onto computers and the Internet, counselors will no longer be the key gatekeepers in these areas. They will be free to evolve their roles to serve students and teachers in ways more closely and directly related to student learning.

Similarly, the librarian, or media specialist, will be challenged to become truly a specialist in information access and utilization. These personnel may not necessarily need to have highly developed technical skills in the use of technology, but must, at a minimum, be highly expert in the accessing and analyzing of information from an exceedingly broad range of possible sources. A high degree of familiarity with the Internet will be an absolute starting point. Beyond this, media specialists will need expertise in multimedia, video, and computer-based presentation modes. While some technical skill is useful, their contributions will be more in the area of how to organize and sequence the presentation of information via video and multimedia.

As students begin to demonstrate their knowledge via presentation, they will need more assistance in how to develop quality presentations. Here is an area where a media specialist can be expected to work with local resources outside the school to ensure state-of-the-art knowledge is available to students.

While books will remain important well into the future, their processing need not be handled by people with teaching certificates. Such expertise will have to be devoted to value-added activities such as those described relating to information access, organization, and presentation.

Another response to the need for additional flexibility in the allocation of human resources in schools may be the use of more part-time and specialized employees, a practice increasingly common in the private sector. Variations on career ladders for teachers offer still another option: A neophyte might begin his or her career in education as an apprentice, later become tenured, and eventually be able to attain master-teacher status.

Enhanced flexibility in personnel assignments and roles will be increasingly important in schools that redefine their purpose and direction, their curriculum and instructional program, and their learning environment. Such schools will need to have more adult-child interaction and allow some specialization of teacher roles to emerge. The ability to staff schools with a variety of adults in a variety of roles will become ever more important.

ENHANCING THE PERFORMANCE OF NEWLY HIRED TEACHERS

Restructured schools are likely to demand teachers with high skill levels, positive attitudes toward change, and the ability to work collaboratively. More attention to hiring practices and to evaluation prior to granting tenure are two inexpensive ways districts can begin to upgrade the quality of their personnel in support of school restructuring.

Policies in this area are particularly important considering the number of new teachers that will be coming into the profession over the next ten years as the teachers hired in the late 1960s, the last period of truly rapid hiring, begin to retire. This demographic phenomenon presents a real opportunity to bring about change in schools if it is handled in a systematic, goal-oriented fashion.

Candidates for positions in restructuring schools should possess beliefs that are consistent with the philosophy of the school where they are to work, understand and believe in its vision, and be committed to demonstrating both personal growth and flexibility, understanding that they may be asked to adapt their skills and roles frequently throughout their teaching career. This is a far cry from the situation today, where some teachers may become upset if asked to move from one classroom to another, let alone add new instructional skills or teach in a different educational setting.

Newly hired teachers should be socialized into their roles as change agents by means of mentors, professional-development opportunities, and positive support from administrators. They should not be allowed to be "taken under the wing" of the nearest veteran teacher, some of whom may pass on a jaundiced or cynical view of teaching, students, and the school. The first three years of a new teacher's career are crucial and should not be overlooked.

Programs that attend to the needs of these teachers can yield benefits in support of change. For example, support groups where new teachers talk with one another help them maintain perspective and establish an external frame of reference for the socialization that is occurring in schools. Staff development helps them create norms of lifelong learning. Mentors (formal and informal) give them a place to turn in a crisis, to help them avoid the natural human tendency to teach as they were taught rather than mastering the techniques necessary to be successful with the group of students they have. Supervision and evaluation policies and procedures give administrators a chance to see new teachers in action and to talk with them about what is happening in their classrooms.

Evaluation of nontenured teachers may not seem like an important restructuring strategy until one realizes that a teacher, after receiving tenure, is likely to remain in the school for a generation or more. The ability of schools to adapt to changes in the next century is being determined by the processes employed and decisions made by those granting tenure to teachers today. In this context, it is apparent that more attention should be paid to the growth, development, and evaluation of nontenured teachers. The following suggestions pertain to hiring and tenure practices and development of nontenured teachers.*

Develop comprehensive hiring procedures that include evidence of previous teaching competence. In this era of the video camera, it is not unreasonable to ask candidates to provide a video of themselves in a classroom setting. Ten minutes of videotape can reveal more than hours of interviews.

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* The following paragraphs have been adapted from Conley, David T. "Eight Steps to Improved Teacher Remediation." *NASSP Bulletin* 75,536 (September 1991): 26-41.

In the absence of a video, asking candidates to view a video of a teaching situation and describe what was done well and what might need to be changed can be highly informative. In Berliner's research, different conclusions were reached by novices, postulants, and master teachers as they viewed teaching situations (Brandt 1986).

Ensuring that a comprehensive reference check is undertaken before a contract is extended should be insisted upon in all cases. Anecdotal information from administrators indicates that when established procedures were bypassed or performed in a cursory manner, problems often occurred later. This simple advice applies in particular in situations where someone is hired at the last minute (a common practice). It is easy but misguided not to inquire about the person once they are on board and seemingly doing an acceptable job.

Develop a mentor program for all new hires. The mentor program should allow visits by the mentor to the new teacher's classroom. This can help the new teacher adjust quickly to the expectations of the school and the community. The mentor should not be expected to deal with serious performance problems, but can help the new teacher avoid developing habits that can lead to difficulties later. A mentor program is valuable because it allows beginning teachers to receive frequent high-quality feedback on their performance (Peterson 1990).

School districts and states have already put considerable effort into developing mentor programs for teachers. This experience can be drawn upon by other districts interested in developing mentor programs.

Provide teachers in their first year of employment with an extended contract. Have new teachers report to school a week before other teachers, not just to decorate their bulletin boards, but to learn about the district's performance standards and expectations, evaluation procedures, and sources of help and assistance. Have them meet with their mentor on a regular basis. Expect them to videotape their lessons and discuss them with others. Provide them with some release time to see other teachers in action. Give them a day or two at the end of the first year to reflect and develop a plan of action to pursue over the summer and into the coming school year. Demonstrate to them that they are in a culture that supports and values excellence.

Be certain to observe all new hires in the classroom during the first week of school. In many schools there is an unwritten agreement between principals and teachers that principals will not be in classrooms during the first several weeks, to allow the teachers to "get things settled down." While formal observations may be inappropriate during the first days of school, Emmer and Evertson's research (Emmer and others 1980, Evertson and Emmer 1982, Evertson and Harris 1992) has demonstrated that most management problems develop as a result of teacher behaviors during the first weeks of school. It is much easier to identify problems as they are developing than to try to undo them after they are firmly established.

Don't grant tenure to mediocre teachers. Allow only excellent teachers to achieve tenure or permanent-employment status. This is stated as a goal in many districts. In practice, however, it is often the exception rather than the rule. Following the recommendations that have preceded will help ensure that teachers who are being considered for tenure have been thoroughly scrutinized as well as supported and nurtured. Allowing a teacher to gain tenure may be one of the single most important responsibilities that an administrator has. It should be treated as such.

One of the key ingredients required to make restructuring succeed is a caring adult, one who wants to work with young people. No training program or new educational structure can transform all teachers into caring people. At the same time, the types of changes discussed here have the capacity to make schools places where there are more adults who genuinely care about children. Staffing schools with adults who care about kids is as important as any of the more spectacular changes being considered.

CHAPTER 20

CONTRACTUAL RELATIONSHIPS

Many of the ideas and trends discussed in part 3—on topics from learning standards to personnel—have broad implications for the codification of working relationships within the school district as embodied by the contract. This chapter examines the relationship between educational restructuring and labor-management relations.

The first three sections trace the evolution of collective bargaining in education from its roots in industrial trade unionism, examine the transition to a focus on teachers' professionalism, and ask whether conflict can be avoided. Then, the next section looks at how the restructuring movement is putting pressure on both management and unions to change their roles and relationships. The final section describes collaborative strategies that are offering new models for working relationships.

ROOTS IN INDUSTRIAL UNIONISM

The current model of working relationships is based on principles of trade unionism honed in the 1930s in the industrial sector of the economy. From the midsixties to the end of the seventies, these principles were applied effectively to schools, if increases in wages and improvements in working conditions are used as indicators of success. By the midseventies, however, the limits of this model of labor relations began to become evident. The percentage of district budgets allotted to total employee compensation reached the 80 to 90 percent range in many cases. There was little room for improvement in the arena of wages and benefits, the so-called "bread and butter" issues. Unions shifted their attention to issues related to working conditions, such as length of the work day, amount of preparation time, specific teacher duties, policies for assignment, transfer and reduction-in-force, grievance procedures, and, ultimately, class size.

Unions made significant gains in negotiating working conditions in the seventies and, according to Goldschmidt and Stuart (1986), on through the mideighties. More contracts contained specific language defining and delimiting how teachers were to be treated, and what administrators could and could not do. Goldschmidt and Painter (1987-88) argue that this process actually began as early as the sixties: "Over time, teachers and school boards have increasingly discussed and agreed to contract provisions that determine important educational policies (e.g., curriculum, student placement, teacher assignment, retention and development)" (p. 18, see also Perry and Wildman 1970).

Emphasis on working conditions and compensation issues varies in negotiations in the 1990s depending on the financial condition of the school district. When less money is available, the emphasis shifts to working conditions. It appears less likely that gains as significant as those in the seventies can be made by teachers' unions in either of these areas. In fact, Goldschmidt and Painter (1987-88) cite Cresswell and Spargo (1980) to suggest that the wage increases teachers attained as a result of collective bargaining in the 1970s might have been as low as 1 percent to 8 percent more than what they might have expected to gain if they had not engaged in collective bargaining. Other studies cited similar ranges (Lipsky 1982, Cooper 1982). If large wage gains cannot be expected as a result of collective bargaining and the application of the industrial-trade-union model to education, the motivation for shifting the emphasis of bargaining to policy issues becomes even more evident.

Both labor and management appear to have settled into roles that have become familiar, almost comfortable when approaching one another across the negotiating table. The rituals of collective bargaining are practiced with great predictability, and the outcomes can often be foreseen before the process begins. The amount of money is finite and fairly well fixed in its distribution before talks begin. Negotiation of compensation becomes an almost predictable activity since more and more of the elements are already locked into place and effectively cannot be redistributed. The area most attractive for bargaining then becomes the domain of educational policy as manifested in terms of specific working conditions. This development is significant when considering restructuring, since most of what constitutes restructuring potentially relates to working conditions.

Collective-bargaining provisions related to policy (class-size limitations, transfer policies, and so forth) are highly visible and must be enforced with uniformity. This uniformity results in reduced adaptability and runs counter to the image of school districts as loosely coupled systems (Stuart and Goldschmidt with Painter 1986, Pitner and Goldschmidt 1987).

> When negotiators fix educational policy choices for the term of an agreement, they void or minimize traditionally available opportunities for individual teachers and administrators to exercise alternative professional or

> political judgment. A reduction in autonomous behavior has a potentially significant impact on the organization of schools (Meyer and Rowan 1978; Weick 1976). (Goldschmidt and Stuart 1986, p. 357)

The net effect of the shift in the emphasis of bargaining to working conditions may have been to reduce the already limited adaptability and flexibility present within most educational organizations. The contractualization of working conditions reduces the capacity of administrators and, more specifically, principals to respond and adapt to shifting conditions, resources, and expectations for public education (Goldschmidt, Bowers, and Stuart 1984; Goldschmidt and Stuart 1986).

Goldschmidt and Stuart (1986) emphasize how standardized procedures have already tended to immobilize administrators, particularly principals, and have created the conditions for greater centralization of decision-making in school districts that codify working conditions in the contract:

> As school districts set criteria for staff selection, assignment, and transfer, establish processes for student assignment and discipline, and employ specialists to manage the contract and ensure compliance with its mandates, the discretion of the school administrator closest to the operation of each school building is sharply reduced in favor of the central office....
>
> Taken together, the effects of centralization and specialization are to fix administrative behavior. In the same way that a contractually mandated curriculum establishes a necessary minimum offering, the legal requirement to comply with provisions of a contract dictates some of what administrators must do and cannot do. As a result, both the organizational structure and the work roles and responsibilities of individuals within the organization change to accommodate the special interests and processes in collective bargaining. (p. 358)

This loss of flexibility would not be as much of a concern if today's schools were not under such pressure to adapt. The codification of working conditions would serve a useful purpose in stable environments and could be very desirable, particularly if there was widespread agreement about what constituted effective educational practice. This does not seem to be the case currently.

This emphasis on bargaining over a wide range of working conditions will likely collide with a counterforce present in many states and districts—the movement to decentralized decision-making. Because most contracts are based on the notion that all teachers are one class of workers and should be treated in the most uniform manner possible, settlements that focus on creating standardized working conditions may also inhibit the ability of individual school buildings governed by site councils to develop nonstandardized solutions or procedures they deem best for their situation. Goldman, Dunlap, and Conley (1993) examined a group of schools that were leaders in reform. The capacity of those schools to make their own decisions was an important dimension of their success. Goldman and colleagues considered the implications of this shift toward school-based decisions and strategies:

> As educators begin to explore the possibilities of new arrangements and techniques for education, the almost sacred notion of "one best system" of schooling will be challenged. Educators at the school site level may employ the knowledge and skills they acquire... to develop many more "nonstandardized" solutions to the problems and issues *they* define as most critical to the improvement of their practice. The implications that flow from such a restructuring of the notions of authority and power have the potential to reshape the image and structure of schooling. (p. 91)

Schools appear to be in a period when the capacity to adapt rapidly to changing conditions, populations, expectations, and resources available may be a key characteristic for survival. Even in many of the districts involved early in restructuring, there has been a tendency to incorporate restructuring procedures into the master agreement, often severely limiting the potential effectiveness of such activities. The parties have chosen this course because they continue to think in terms of traditional collective-bargaining models as the vehicle for expressing all agreements and resolving all conflicts.

The industrial-trade-union mindset is a powerful mental model present in many, perhaps most, school districts. It stands unquestioned as the basis for relations between and among teachers, administrators, and boards of education. These basic tenets and assumptions may be coming under examination as educators struggle with the distinction between unionism and professionalism.

UNIONISM VS. PROFESSIONALISM

Has collective bargaining led to a greater sense of professionalism on the part of teachers, since they can now influence the conditions under which they work? Or has it encouraged teachers to think of themselves as laborers who have little responsibility for the ultimate outcome of their teaching activities? These questions have been debated among those who study the phenomenon (Kerchner and Mitchell 1986, Lieberman 1980, McDonnell and Pascal 1988).

Teachers' unions, or *professional associations* as most prefer to be called, have gained mastery of collective bargaining, grievances, arbitration, fact-finding, strikes, and all other manifestations of the trade-union model of labor relations. Management and boards of education, after a slow start reacting to collective bargaining in the seventies, caught on to the new rules of the game and became versed in these methods as well. Although many school-board members and central-office administrators complain bitterly about collective bargaining, most appear comfortable with the predictable patterns, cycles, rituals, and roles of the collective-bargaining process and of traditional trade-union labor-management relations. Public education has only recently institutionalized the exact model of labor relations that the industrial sector is currently seeking to redefine.

Why did education choose to adopt the industrial model of labor relations when the goals and processes of education are so different from those of a factory? Shedd and Bacharach (1991) suggest that it is the structure of management and the prevailing logic educational managers employ in their administration of schools that predetermined this choice:

> Teachers and their unions adopted factory union strategies because the administrators and school boards they faced insisted on acting like factory managers. Indeed, one of the basic reasons so many teachers chose to join unions was that the prevailing logic of education management was itself patterned on the industrial model (Cole 1969; Callahan 1962). The structures, processes, and myths of industrial unionism complemented and in some ways even supported the top-down managerial ideology that existed in most school systems when teacher unions first won recognition, just as they fit the factory management systems of the 1930s. If there are grounds—and there are—for believing that unions and employers in public education are now in the process of inventing a new form of collective bargaining, it is because that management ideology itself is under serious attack. (p. 177)

Kerchner and Mitchell (1986) and Johnson (1987) argue that education is in the process of adapting collective bargaining to its unique needs and structure. It is likely, they say, that much of the emphasis in bargaining will be on policy issues, as teachers' unions come to perceive control over working conditions as a focal point that responds to teachers' desires to be perceived as professionals. Meanwhile, the process itself remains consistent with many aspects of the trade-union approach to organizational relations. Whether this focus on policy issues will occur, particularly in the face of tight fiscal times where unions tend to become more confrontational around bread-and-butter issues of salaries and benefits, remains to be seen.

Shedd and Bacharach (1991) speculate about the path that an evolution of collective bargaining in school districts might take. If collective bargaining is indeed undergoing a major change from a traditional labor-union model to one specifically adapted to public education, they say,

> then it is possible that the seemingly contradictory evidence of bargaining effects may be drawn from school systems at different points in such a

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> transition. The evidence that collective bargaining has produced rigidity, centralization, diminished supervisory authority, and a "laboring" conception of the teacher's role may be drawn from settings where a traditional (industrial) model of collective bargaining continues to predominate. The evidence that bargaining has produced increased flexibility, responsiveness to public concerns, respect for the leadership role of building principals, and teacher involvement in professional decision making may reflect labor-management relationships in settings where the parties have made the transition to a newer form of collective decision making. The evidence of increased conflict and bitterness in education bargaining may be characteristic of relationships in transition between these two approaches, as one party struggles to reconstruct the labor-management relationship along lines that the other refuses to accept.
>
> The basic outlines of this argument are sound. It is well documented in the general research on industrial relations that the parties to collective bargaining relationships tend to adopt substantive and procedural rules that reflect the characteristics of their particular industry (Dunlop, 1958; Kochan, 1980). It is equally well documented that the most serious conflicts in labor-management relations tend to occur when one or the other party attempts to change the structures and processes of bargaining itself (Weber, 1964; Chamberlain and Kuhn, 1965). There are good reasons to believe that school managers and teacher unions are, in fact, creating a new set of rules to govern their relationships—a set of rules uniquely tailored to their particular environment. (p. 167)

This analysis suggests that schools may be in the period of greatest danger as they attempt to make the transition from the known to the unknown; significant conflict is most likely when roles are being redefined. What is the goal? How should unions function if their relationship changes?

CAN CONFLICT BE AVOIDED?

The current model is premised on confrontation and potential conflict, not collaboration, as its primary method for resolving differences. Many of the new visions of the union's role are really restatements of the old role with conflict reduced. Shedd and Bacharach (1991) describe the characteristics of this new vision:

> Rather than being adversarial and concerned with preserving their own power, the new unions will be cooperative and nonconfrontational. Rather than opposing efforts to improve the quality of teaching, they will actually assume responsibility for the quality and quantity of their members' efforts. Rather than negotiating rules that restrict flexibility, they will look for ways to relax restrictions on both teachers and administrators. Rather than insisting that teachers' rights and benefits be allocated equally or else

> on the basis of seniority, they will insist that the responsibility and compensation of teachers be differentiated, ordered hierarchically, and allocated on the basis of professional competence. (p. 168)

But can conflict be eliminated from labor relations in school districts? Is this even a reasonable goal? Or is conflict an inherent part of the relationship among teachers, administrators, and boards of education? Shedd and Bacharach (1991) suggest that this may not be an either-or question, that the goal may not be to eliminate all conflict, but to employ strategies that allow new sources of conflict to be identified and resolved:

> The argument that conflict and lack of cooperation are defining characteristics of traditional labor-management relations—as opposed to particular labor-management relationships— is open to serious challenge, and the conviction that cooperativeness will be a defining characteristic of the new labor-management relations in public education is probably misleading as well. A bargaining system tailored to the markets, work processes, and management systems of public education undoubtedly will remove some of the present sources of conflict in teacher bargaining. But such a system will almost certainly expose other sources of conflict that until recently have been sheltered behind assertions of management prerogatives and union indifference. (p. 169)

RESTRUCTURING REQUIRES FLEXIBILITY

Where school restructuring is occurring, it is putting pressure on the negotiated agreement and on traditional management relationships. Districts are having to learn how to make exceptions or unique accommodations to allow greater flexibility for individual teachers or school sites to function more independently within the framework of a collective-bargaining agreement. In districts that are restructuring, schools need to be able to request waivers from the contract. Decision-making and rule interpretation may become decentralized and idiosyncratic. Individual faculties and faculty members often chafe under rules designed to protect workers from the arbitrary actions of management, particularly when the distinctions between labor and management have become less clear.

In these situations teachers are ready to take greater responsibility for their working conditions, to operate in a more professional relationship, and to abandon the security of the contract as they negotiate the rapids of change. They may have less interest in a model whose fundamental premises are that all members of the organization with the same job title should be treated in the same manner and that they should act in solidarity when dealing with management. This uniformity conflicts with the needs and desires of some to determine for themselves issues such as the hours they work, subjects they teach, responsibilities they have, and decisions they make.

There will probably continue to be a role for elements of traditional collective-bargaining models in school districts, particularly related to wages and benefits. The area where bargaining strategies may undergo change is in how working conditions are included in contracts and how such decisions are made by individual school sites. This is where most systems need greater flexibility, and where teachers are beginning to exert influence as site-based management and participatory decision-making are implemented in schools. Teacher involvement in decisions related to working conditions (schedule, budget allocation, class size, teaching loads, and so forth) causes difficulties for the traditional trade-union model of labor-management relations. How does one teacher file a grievance against a decision made by a group of teachers? Who is the target of the grievance? Who is a teacher and who is an administrator? These issues are as troublesome for management as they may be for teacher representatives.

Concrete issues such as these are beginning to emerge. For example, charter-school programs have run into opposition from state teachers' associations, which are concerned that teachers in charter schools might not be certified. Similar concerns have been raised around distance education and the use of technology more generally. The ability of various support staff and community mentors and volunteers to instruct children has come under discussion in contract negotiations where the unions see such practices as potential incursions into the legitimate domain of the teacher.

ISSUES RAISED BY SCHOOL-SITE COUNCILS

Changes in governance structures, particularly the addition of mechanisms such as site-based school councils, capture the attention and interest of teachers' organizations, as they attempt to ensure that the interests of their members are properly represented on such councils.

Unions' desire for representation on site councils raises a fundamental issue: Do council members represent organizations, or do they serve as "leaders" acting as "people of good will" charged with solving the school's problems by means of their collective perceptions? In other words, does the parent represent the PTA; the school secretary, the classified employees union; the teachers, the teachers' union; the principal, the principals' association and the central administration; and so forth for the purpose of interacting within the parameters of a contract? Or do they represent diverse viewpoints with the primary goal of creating a more effective learning environment for children? Do site councils serve to address issues related to the working conditions of adults independent from or in close relation to the learning needs of children?

This issue is often unresolved when such councils are formed. The distinction can be crucial. Councils that represent formal constituent groups may do little more than serve as a form of shop steward meeting. No decisions will likely be made without referring to the contract, returning to poll members, or consulting superiors for guidance or interpretation of the group's policy on an issue. These groups seem handicapped in their ability to help a school develop new visions and solutions to complex problems. They reflect the old assumptions and fears about labor relations. They may serve primarily to maintain the status quo and allow the school to function more smoothly within existing rule-and-authority systems.

On the other hand, school-site councils that do not follow these restrictions find themselves in uncharted waters. They serve at the pleasure of their peers, with little guidance regarding their authority and charge. Principals often feel threatened by such groups (Hallinger, Murphy, and Hausman 1991), and there are few precedents to instruct participants when they are thrust into new and unfamiliar roles. These councils can threaten the very existence of the union, particularly if they are able to address issues of working conditions. If each school can create its own working conditions, the master contract is limited primarily to issues of compensation and benefits. Indeed, tight financial times are creating situations where there is considerably less room for negotiation even of compensation issues, thereby further restricting the union's role. Will unions be willing to cede control over policy issues to such bodies at a time when those very issues may help rally the membership to support the union? And will the central administration want to lose control to site councils?

REDEFINITION OF ROLES

Restructuring seems to be more successful in situations where some trust between "management" and "labor" can be developed. The process of developing trust starts on a small scale and builds on each success to allow greater risk-taking on both sides. Districts that are redefining working relationships are often doing so gradually, with each side demonstrating its intent in controlled situations. For example, the two parties may form joint labor-management committees to address issues not specified in the contract. When such committees exist and function successfully, both sides may be more willing to leave many provisions out of the contract, to be discussed and resolved jointly as issues arise. In essence, the bargaining process continues constantly throughout the period of the contract, with as many issues as possible being resolved as they arise. This continuous process can help to decrease the number of issues to be addressed during formal bargaining.

Most school districts see the need to redefine the role of the professional association as one key dimension of its restructuring strategy. At the same time, they will benefit by redefining the role of management, as well. So long as school systems organize themselves using turn-of-the-century private-sector models, such as Taylor's notions of scientific management and bureaucracy, they will invite teacher responses based on this model. If treated like laborers, teachers will act like laborers within an industrial-management model. Not only must unions change, but management must change in step. Rarely can the union be expected to take the initiative. It is generally up to management, both boards of education and administrators, to rethink their philosophies of organization and of employee relations as a first step toward new bargaining models.

Top-down, or hierarchical, management models are comfortable to many, both teachers and administrators. Movement away from such structures is threatening to those who have learned how to survive and prosper within such a system. School systems, however, may not actually function best as top-down systems that can be directed or controlled centrally:

> The top-down strategies that have ostensibly guided school management have never made more than partial sense in public education and have never been strictly observed. At one moment teachers are treated like workers on an assembly line, at another like bureaucrats executing general directives, at still another like independent professionals who are expected to figure out for themselves what it is they should be doing. (Shedd and Bacharach 1991, pp. 179-80)

New models imply more teacher participation and involvement in decision-making on issues central to teaching and to the design of learning experiences and environments. They imply fundamentally different relations between administrators and teachers, but also among teachers themselves. The primary purpose for this change is not simply to satisfy the needs one group has for power and control over the other, but to create an organizational environment that is more adaptable and effective in responding to changing goals and heightened expectations for accountability. School districts that cannot meet student needs and improve student learning will receive ever greater scrutiny and will not automatically receive more money. This one factor alone may engender greater cooperation and collaboration among traditionally adversarial groups in education.

Is there a future for teachers' unions in a new, more collaborative educational environment? Will teachers' unions disappear if top-down management practices cease? Or will such changes create a power vacuum into which unions will step? Perhaps none of these will occur. However, teachers' unions are in a position to redefine their roles if such changes in management philosophy take place. They are uniquely different from industrial unions and can exploit the fact that teachers are both workers and managers in a real sense:

> Teacher unions may be threatened by the demise of top-down management strategies, but they are also in a good position to take advantage of that demise.... [P]ressing for collective teacher involvement in school and district decision making offers the possibility of overcoming the split between union and professional factions within their own organizations by shifting the focus of thinking about professional issues away from individual autonomy. Perhaps most important, such a shift might allow teacher unions to finally take advantage of a source of potential influence (or, to put the matter more bluntly, a source of power) that industrial union principles have always required them to overlook: Their members, as individuals, already manage much of what goes on in most school systems. (Shedd and Bacharach 1991, pp. 182-83)

Both management and unions are going to change their roles and relationships, in all probability, as public education adapts itself for the twenty-first century. While the distinction between the two groups is unlikely to disappear, and in fact the distinction can serve a useful purpose in helping areas of conflict to surface and be resolved, the evidence suggests that schools will become more collaborative work environments, where teachers are both workers and managers, and principals are facilitators and organizers, not merely bosses. This transition to a more collaborative model will be challenging for school districts steeped in the culture of industrial models of management and labor relations.

COLLABORATIVE BARGAINING AND POLICY TRUST AGREEMENTS

Two early manifestations of this transition in bargaining are collaborative bargaining and policy trust agreements. Both are attempts to develop new methods to solve old problems within a context that suggests new relationships between management and labor. Each is discussed briefly with some examples of its application in school districts.

COLLABORATIVE BARGAINING

Several techniques have been attempted over the past several years to make traditional collective bargaining less confrontational. Smith, Ball, and Liontos (1990) use the term *collaborative bargaining* to describe a variety of experiments in bargaining that seek to move beyond the limits of collective bargaining. They distinguish between traditional collective bargaining and collaborative bargaining:

> Collaborative bargaining is not an alternative *to* collective bargaining, but rather is an alternative *form* of collective bargaining. Just as there are many different methods of traditional adversarial bargaining..., there are many varieties of collaboration being instituted by school districts and teacher unions.... Some districts, particularly those in big cities, are finding, however, that collaboration is not only a worthwhile end in itself, but an extraordinarily effective means to achieve a higher end: school reform. The district and union leaders in these cities are using collaborative bargaining as a vehicle to initiate school-based management, mentor teacher programs, performance accountability mechanisms, and other reforms. (pp. 2, 4, emphasis in original)

There are common elements as well as widespread variation in the ways in which collaborative bargaining is developed and practiced in districts throughout the country. At the heart of the approach is the idea that bargaining should ultimately be a win-win proposition. Many issues can be addressed outside the traditional collective-bargaining sessions by teams of teachers and administrators who understand the problem being addressed much better than members of negotiating teams who may be dealing with several dozen issues simultaneously. Furthermore, most collaborative-bargaining models include provisions for continued discussions throughout the period of the contract, and even the reopening of specific sections of the contract if changes need to be made before the contract expires. The idea is that the contract continuously evolves based on the needs of the organization and its constituent groups. Issues do not pile up awaiting formal bargaining sessions. When bargaining occurs, it is focused on fewer issues that can then be addressed more directly and conscientiously.

Smith and others (1990) provide examples of how collaborative bargaining was developed and practiced in a number of school districts:

> Glenbard [Illinois] established a steering committee of school board and union representatives to research the win/win negotiating system and draw up a list of benefits and drawbacks. Among the advantages of win/win bargaining that the committee found were contract settlements with slightly higher teacher salaries (approximately 1/2 of 1 percent higher), increased union cooperation with school boards, and improved teacher morale.
>
> In February 1987, the steering committee outlined a negotiation schedule. It was to begin in April with an all-day session at which both sides would put contract issues on the bargaining table....
>
> Once issues were on the table, a committee of board and union leaders met in a followup session to divide the issues into two categories: issues to be negotiated formally (such as salaries) and issues to be resolved through less formal talks between board and union members. Subcommittees, formed to focus on specific issues, met two evenings per week. On the final session day, teacher salaries were still being negotiated and the session stretched to sixteen tension-filled hours before the contract was signed. The Glenbard attempt at win/win bargaining was termed a success: A contract had been signed three months before the old one expired, and the district enjoyed improved teacher morale and board/union cooperation in 1988. (p. 28)

Warwick Valley Central School District, New York, had only recently emerged from a period of intense contract negotiations conducted by third-party union and board negotiators. The sessions had dragged out over sixteen months. The district decided to develop a process that encouraged frank discussion and debate and that discouraged confrontation and posturing:

> Their attention landed on the only successful feature of the previous contract negotiations: a joint committee that had researched and made a recommendation on stipends for staff who perform cocurricular activities. The joint committee process had worked so smoothly that the district decided to negotiate the entire new contract on the basis of recommendations from joint committees.
>
> Tagged a "good faith experiment," the process included an agenda committee (comprising the school board president, another board member, the president and vice president of the teacher union, and the superintendent), which established the timetable and some basic guidelines. The agenda committee... was also charged with reviewing and, if necessary, discarding negotiations items, under the agreement that a few small committees would concentrate on a few genuinely important issues. Limiting the agenda was credited with making the new process work by helping board members and teachers define priorities. Ten items, including teacher salary, were the maximum number that could be introduced.
>
> Once the agenda was set, four committees each containing two or three teachers and at least one board member went to work. Joint committees reported back to the agenda committee, which strove to include at least

> portions of each committee's recommendations in the contract, written up at the table by the board attorney. The three-year contract, ratified overwhelmingly by union and board, was put together in a timely manner without confrontation and disruption of the educational process. (Smith and others 1990, pp. 29-30)

POLICY TRUST AGREEMENTS

Policy trust agreements are another mechanism by which collaboration can be promoted and problems can be anticipated and addressed outside the formal bargaining process. In California the Policy Analysis for California Education worked with twelve districts to put policy trust agreements into place. The goal, as Smith and others (1990) explain, was to

> develop new forms of school organization and new patterns of relationships among teachers and school administrators and to expand the range of labor/management discussions from technical, procedural work rules to the essence of educational policy....
>
> ...[A] policy trust agreement "is a written compact between a school district and its teachers, as represented by their union" [Koppich and Kerchner 1990]. Its purpose is "to specify educational problems of joint concern to teachers and school managers and to establish mechanisms for working on these problems." The trust agreement encourages a sharing of decision-making responsibility between teachers and school administrators, thereby altering the traditional, hierarchical authority relationships in the school district.
>
> Trust agreements are not considered to be alternatives to collective bargaining, but a process to strengthen teacher responsibility in innovative programs that tend to fall outside the scope of the collective bargaining agreement. Nor are trust agreements intended primarily as devices to reduce conflict....
>
> ... Trust agreements differ from collective bargaining contracts both in their conceptions of work activities and in their procedures for implementation and problem resolution. Contracts "seek to specify *rules*," says [Douglas] Mitchell, whereas "trust agreements develop shared *goals*. This difference is extraordinarily important." Rules mandate behavior and delineate employee rights, then they hold the parties accountable for not wavering from mandated actions. By contrast, "the goals specified in a trust agreement define the *purposes* of teaching work activities and identify the *resources* to be used in pursuing those purposes."
>
> In other words, trust agreements encourage teachers and administrators to cooperate in deciding what needs to be done. The emphasis is on joint planning rather than on accountability. (pp. 33-34, emphasis in original)

GUIDELINES FOR BEGINNING TO COLLABORATE

While collaborative bargaining and policy trust agreements are concepts that are still evolving, there is much that can be learned from them and from the experiences of districts that develop and employ these strategies. These arrangements seem to be extraordinarily difficult to sustain, particularly when the "champions" of these approaches depart. It may be that in some districts (perhaps most) there will be a period where the bargaining moves a step or two toward collaboration, then back toward traditional methods. The transition may take time and patience, and the final result may bear little resemblance to early efforts.

Some lessons have been learned from those districts that have been involved in experimenting with collaborative bargaining. Smith and others (1990) offer the following guidelines for those interested in pursuing collaborative bargaining along with those who might choose to incorporate aspects of collaboration into their collective-bargaining process:

Before Bargaining:

- Consider holding an informal forum where representatives of all interested groups can openly discuss previous conflicts and frustrations.
- Build mutual trust.
- Conduct an inclusive forum to discuss past bargaining failures and possibilities for future efforts.
- Jointly research the alternative methods of negotiating contracts and resolving problems.
- Enhance communication and negotiation skills.
- Establish a timetable and some basic guidelines for the process, including an "escape clause" that will allow you to return to traditional collective bargaining.
- Form an agenda committee and limit the agenda to essential issues.
- Choose team members wisely.
- Remember that communication is crucial.

During Bargaining:

- Meet in comfortable, informal surroundings.
- Have patience.
- Don't try to accomplish everything at the bargaining table.

- Carefully and cooperatively approach the issue of salaries.
- Keep communications open.
- Keep information flowing.
- Negotiate with a spirit of problem-solving.
- Maintain good community relations.

After Bargaining:

- Publicize the gains that collaborative bargaining has achieved.
- Maintain union leaders' legitimacy in the eyes of their members.
- Keep a tickler file of problems encountered in negotiations and in administering the current contract.
- Ascertain that agreements are being honored.
- Set up joint committees to handle issues.
- Keep the bargaining continuous.
- Keep staff updated. (Excerpted from pp. 51-59)

SOME EXAMPLES OF PROFESSIONAL UNIONISM

Kerchner and Koppich (1993) provide a series of examples from several school districts that have taken concrete steps to redefine relationships using a more professional model of teaching. They describe programs in Louisville, Kentucky; Pittsburgh; Cincinnati; Greece, New York; Glenview, Illinois; Dade County (Miami); Rochester, New York; Toledo, Ohio; Poway, California; and Chicago that have shown how the working relationships between teachers and administrators can be redefined in a variety of areas considered in many districts to be inevitable sources of conflict. These programs included the following kinds of efforts:

- the use of intensive training and staff development as a precursor to organizational decentralization and the contractual agreements supporting it (Louisville)
- the union's attempt to define professionalism and link it to teacher responsibility for quality assurance (Pittsburgh)
- a means of ensuring continuity of change even though the union officers who created the initial breakthroughs were retired from office by the members (Greece, New York)
- the exchange of the labor contract for a joint labor-management constitution that restructured the district's operations into a series

of committees that incorporated the teacher union as a full partner (Glenview, Illinois)

- a districtwide reform program in which the union was a full partner that included a site-based decision-making plan that allocated substantial resources and authority to schools (Dade County, Miami, Florida)
- a district that adopted teacher incentives, accountability, and quality assurances and struggled to implement the programs in partnership (Rochester, New York)
- the use of peer review and assessment of teachers by teachers in ways that allowed the union to represent the rights and interests of their members and still advance the quality of teaching (Toledo, Ohio; and Poway, California)
- state-imposed reforms in which the school administration and teacher unions were the objects of reform rather than its agents (Chicago). (Kerchner and Caufman 1993, pp. 5-6, paraphrased)

Koppich (1993) describes these activities as "professional unionism."

> Professional unionism represents a radical departure from the classic industrial-style unionism that has characterized American education labor relations for nearly three decades. At its core, professional unionism is anchored in three mutually reinforcing tenets: joint custody of reform, union-management collaboration, and concern for the public interest. Each of these principles of the emergent unionism breaks with tradition, giving a different cast and a new shape to the organizations that embrace them. (p. 194)

Koppich (1993) offers four essential preconditions (summarized below) for unions and school districts that hope to move toward professional unionism:

1. *Understanding that change is not an option.* All the key players must understand that the district must change, and that the district, in fact, will change whether or not they lead the change.

2. *Keeping politics at bay.* Districts that wish to establish more professional working relationships must accept that such changes cannot occur in permanently contested terrain. A zone of tolerance within which experimentation can occur must be created.

3. *Moving beyond anger.* Industrial-style unionism is organized around anger—worker's anger about working conditions. This creates a classic "we-they" dynamic. Professional unionism cannot occur in such an atmosphere. Replacing conflict with cooperation does not necessarily mean the superintendent and union president must develop a warm

personal relationship. However, it does mean that conflict must become depersonalized and name-calling must end. Communication remains open regardless of how turbulent issues become. The focus of disagreements over time become educational issues more than working conditions.

4. *Believing in the necessity of teacher professionalism.* The key players must believe in greatly expanded professional roles for teachers. This imperative must come from the board of education and be communicated clearly to central-office administrators who often have a history of antipathy with the unions. At the same time, teachers must be willing to be partners and take responsibility for solving thorny issues that may involve colleagues. The union must be prepared to let go of standardized work rules. The contract must be seen as a framework for teacher professionalism, not detailed specifications of procedures and duties.

These examples of an evolving sense of professionalism at the local level serve as a model and in some senses a challenge for the large parent organizations, the national teachers' unions. These organizations are exhibiting evidence of rethinking themselves as well.

CHANGES OCCURRING IN THE NEA AND AFT

The nation's two largest teachers' unions, the National Education Assocation (NEA) and the American Federation of Teachers (AFT), are struggling with the notion of collaboration between themselves and are contemplating a changing role for unions in education. They have gone as far as to merge their membership in districts such as San Francisco and Los Angeles and to launch a network of twenty-one local teachers' unions that will look at how unions can play a leading role in promoting change in education while protecting teachers' rights and benefits.

> The Teacher Union Reform Network brings together leaders of local affiliates of both the National Education Association and the American Federation of Teachers. They represent locations ranging from Los Angeles, the nation's second-largest school system with 650,000 students, to the 3,430-student Westerly, R.I. district.
>
> But the union members say they share a common desire: to learn from one another and to craft a new vision of teachers' unions, in tune with changes both in education and in the teaching profession....
>
> "The question is how do you maintain traditional union values while behaving in a different way in a different world?" said Helen F. Bernstein, the outgoing president of the United Teachers of Los Angeles, who will direct the network.
>
> The project's goal is to create new models of teacher unionism that could be used by other affiliates. Union leaders will examine how orga-

> nized labor functions in "high-performance organizations," which are characterized by labor-management cooperation and intense worker involvement in decisionmaking.
>
> "We don't want others to have to go through the pain we've gone through," Ms. Bernstein said of her and her colleagues' efforts to secure a more active role for teachers in education reform. "Each of us has been under attack by our own membership for stands we've taken."...
>
> For Wayne Pike, the president of the Memphis Education Association, the project offers the hope of distilling the union leaders' collective wisdom into a model for future action.
>
> "We are moving away from the old adversarial behaviors to more collaborative behaviors," he said. "We are looking at a role that is different than just to sit down at the bargaining table and bargain teacher contracts and rights." (Bradley, May 8, 1996, pp. 1, 9)

There are other indications that unions are beginning to show a willingness to reassess their purposes, goals, and practices. The NEA has shown more interest in reform and has launched efforts to portray the union as supportive of more flexible thinking and a stronger orientation toward educational improvement.

> In the past year, officials of the nation's largest teachers' union have taken steps to position the 2.2 million-member organization at the forefront of reform. Among those steps are an internal reorganization of the union's bureaucracy and a new, research-based program to help affiliates evaluate the quality of their schools.
>
> "We are shifting the focus of the N.E.A. so we place more emphasis on education reform and we place more emphasis on the public schools of America improving," Don Cameron, the union's executive director, said recently. "We are focusing virtually all our human and financial resources into those goals."...
>
> The union's leaders have backed these gestures with internal changes meant to focus the union's resources more sharply on educational issues rather than on collective bargaining and advocacy.... (Bradley, July 12, 1995)

The Center for Teaching and Learning, created last fall to be the union's brain trust on educational issues, merges all the union's school-reform and policy programs, including:

- The National Center for Innovation, created in 1990, which houses the union's Mastery in Learning and Learning Laboratory restructuring projects;
- The teacher education initiative, through which the N.E.A. is collaborating with 17 colleges of education to improve teacher training;
- The National Foundation for the Improvement of Education, which is in the midst of a two-year study of professional development; and

> - The Center for Education Technology, which explores ways technology can help restructure the educational environment.
>
> The Center for Teaching and Learning also includes the N.E.A.'s efforts to track key issues in the teaching profession, including national certification and the accreditation of teacher-preparation programs.
>
> Lynn Coffin, the senior director of the National Center for Innovation, said blending the reform initiatives and the union's policy analysis reflects the maturation of the union's forays into restructuring.
>
> The Center for Innovation plans to distill what it has learned from the Mastery in Learning and Learning Laboratory sites into useful information for teachers. (Bradley, July 12, 1995, pp. 1, 11)

The AFT was the early leader in embracing reform, which included pioneering collaborative efforts in Rochester, New York, and Dade County, Florida. The union continues its exploration of reform issues in a number of areas, including charter schools, where the NEA has also launched attempts to understand and define charters within an overall framework of a unionized work force:

> In its first major report on charter schools, the American Federation of Teachers has endorsed the concept, while urging greater attention to employee rights and academic standards in charter legislation.
>
> "The lack of common standards, baseline data, and requirements for teacher certification and bargaining rights is highly problematic," AFT President Albert Shanker said in a statement. "These things can be fixed, however, and states that want to give charter schools a serious shot at success should fix them."
>
> The 2.2 million-member National Education Association has also given cautious approval to the idea of publicly funded schools that operate free of many state and local regulations. The NEA is working in five states to help the first union-sponsored charter schools. ("NEA Seeks To Help Start Five Charter Schools," April 24, 1996.) (Ponessa, August 7, 1996)

These early activities by unions may serve as the springboard to new relationships among teachers, administrators, and boards of education. At the same time, unions might seek to coopt reforms like site-based decision-making and charter schools in order to control them so that the status quo is not threatened. It may take several more years to determine what the true intent and direction of the nation's teachers' unions are. These unions remain very powerful entities at the national level. Change will be difficult for such organizations, accustomed to success using their current methods and tactics. However, leaders within these organizations, benefitting from their national perspective and local connections, are often quick to perceive emerging trends to which their organizations must respond. This process of adapting unions to a restructured educational system may just be getting under way.

THE IMPORTANCE OF COLLABORATIVE WORKING RELATIONSHIPS

This dimension of restructuring (contractual relationships), though discussed last, is particularly important because breakdowns in working relationships between teachers and school district management may serve to constrict much of what is possible in the other eleven dimensions. Changes in working relationships manifested in a master contract are unlikely in themselves to cause restructuring, but an inability to rethink these relationships will surely slow and perhaps derail the process. New forms of bargaining and other strategies may point the way for school districts that seek to move away from the industrial union model of labor relations. These changes in bargaining and labor relations only serve to signal more fundamental changes in power relations within school systems.

Schools are no better than their teachers. True educational improvement is much more difficult, some would say impossible, if teachers do not participate in and take ownership of its goals and processes. Teachers must be involved, their opinions respected, their power acknowledged. Private-sector companies have recognized similar principles as they sought in the 1980s to improve productivity and increase adaptability and quality. Once again, as at the turn of this century, there are lessons educators can learn from the private sector. Hopefully, they can adapt rather than mimic private-sector practices. What they learn from the private sector can help guide models of greater collaboration in school districts, but the basic principle of collaboration itself is perhaps the most important focal point.

Many of the specific changes and programs discussed in the chapters on the twelve dimensions of restructuring are based on the premise that teachers, administrators, and others would be willing to work together to a much greater degree than exists today in most schools. These types of changes, if they are to occur, require that teachers forgo their autonomy and isolation and embrace collaborative behaviors and structures. Collaboration, in turn, will demand new leadership styles and new skills from all involved in schooling. Perhaps educational reformers underestimate the ramifications of the greater collaboration that must occur for schools to succeed at restructuring.

This discussion of collaboration in the context of working relationships suggests the opportunities and difficulties schools face as they begin to rethink fundamental practices and relationships. In a restructuring school, the principle of collaboration extends beyond contract negotiation to relationships throughout the organization. Education, like many other aspects of postindustrial society, has become too complex to be conducted successfully by isolated specialists. The future lies down the road of mutual interdependence, of teamwork among adults and children, of human-capital development, of enhanced interpersonal skills, of inclusive leadership approaches and styles, and of organizations that resemble living organisms more than inert structures. Attention to the ways that these relationships are formalized is an important dimension of organizational redesign and educational restructuring.

PART 4

PROCESS OF RESTRUCTURING

INTRODUCTION TO PART 4

Part 3 presented the dimensions of restructuring, the general and specific activities that schools and districts identify as restructuring. These dimensions may be thought of as the *content* of restructuring: the things a school and teacher would do differently as a result of having changed fundamentally. In addition to this content there is also a *process* of restructuring: the activities that lead to the desired changes. In practice the two are intertwined, sometimes so much so that the focus moves from the content to the process almost without anyone noticing. For this reason it is important to be aware of both content *and* process when thinking about educational redesign.

To describe twelve dimensions—the content—of restructuring is one thing; to successfully implement them in schools is an entirely different matter. In the following five chapters, I consider a range of complex issues related to bringing about fundamental change in schools. The ideas and suggestions I present are not intended to be a recipe that, if followed in a step-by-step fashion, will guarantee restructuring occurs successfully and without conflict. Instead, they are meant to serve as an outline of key areas that are important to consider when and where restructuring is attempted.

A large body of literature details the methods and techniques, challenges and difficulties involved in bringing about improvement in educational practice (see, for example: Huberman and Miles 1984; Joyce, Hersh, and McKibbin 1983; Joyce 1991; Eisner 1988; Berman and McLaughlin 1974; Cuban 1984a and 1990; Fullan 1985; Fullan and Pomfret 1977; Goodlad 1984; Goodlad and Klein 1970; Kirst 1991; Malen, Ogawa, and Kranz 1990a; Malen and Ogawa 1988; McLaughlin and Marsh 1978; Sarason 1971 and 1990; Schmuck and Runkel 1985; Teddlie and Stringfield 1993).

It appears likely that schools involved in restructuring will face at least some, if not most, of the issues raised in this literature as they initiate changes that are in many cases much more profound than those examined in the works cited. At the same time, much of the literature on change in schools, with its focus on improving existing practice, may not be as applicable to the more fundamental changes being suggested through restructuring. The latter may result in disruption of existing management and control systems and may bring about changes in power relationships to a much greater degree than appears to occur during implementation of many of the innovations that have served as the focus for previous studies of change in education.

I will not revisit this literature in detail. Instead, I will present a sense of the possible, of how schools can pursues large-scale redesign. My attention will focus on some of the fundamental challenges educators face when attempting basic changes in structure or practice. Early lessons from the emerging body of works on the process of restructuring are included. However, much remains to be learned regarding the phenomenon of school restructuring. Part 4, of necessity, raises issues, offers possibilities, and suggests strategies, rather than presenting prescriptions.

If part 4 is viewed as a cookbook, it may be frustrating for those looking for simple solutions. There is far too much complexity in human organizations for one method or technique to be successful across the range of settings that exist. Although many researchers and writers attempt to make sense of these complex institutions, the meanings they construct serve more as lenses through which to view particular situations rather than a complete panorama of the landscape. Part of the problem, or challenge, of understanding change in organizational settings springs from the multiplicity of lenses through which the phenomenon can be viewed. Each lens provides its own perspective; each is correct within the confines of that perspective. There is no single constant or "objective" vista.

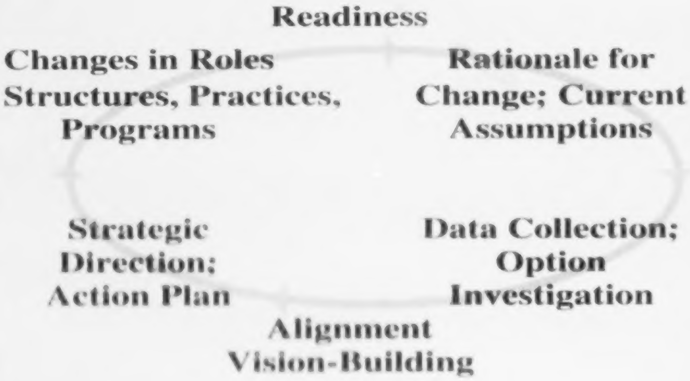
In part 4, I do attempt to present an integrated view of the process of educational restructuring. Clearly, there are lessons to be learned and approaches that work better in some settings than others. The observations, techniques, and strategies discussed in the coming chapters can be combined in a wide variety of configurations, and they may be utilized or initiated in many different sequences. My goal in part 4 is to provide a number of methods and techniques within a logical framework and to invite their use as tools to comprehend change in schools. The responsibility to ascertain how this framework blends into the realities of any given school remains with the reader.

Figure 2 summarizes the components of the restructuring process. Although there is no true "beginning point" for restructuring, the diagram starts with the readiness process on top and proceeds through a number of interrelated steps. In practice, change is initiated at each of the steps in various situations. The diagram serves to summarize the organization of part 4 and to indicate the most important aspects of the restructuring process.

Readiness for change is discussed as a stage in its own right because it is considered an important but often overlooked key to successful

FIGURE 2

Process of Restructuring


Readiness
Rationale for Change; Current Assumptions
Data Collection; Option Investigation
Alignment Vision-Building
Strategic Direction; Action Plan
Changes in Roles Structures, Practices, Programs

educational redesign. I consider this element important enough to have written a separate book on readiness for the restructuring process.*

That book's goal is to serve as a tool to help increase readiness for change. It contains more detailed discussions of the process of restructuring than will be presented here in part 4. However, the overall structure of the two volumes is similar. I recommend it as a tool for schools attempting to enhance readiness, and for educators and noneducators who are attempting to understand restructuring in nontechnical terms.

The remainder of part 4 examines some strategies for facilitating change successfully. It follows the general path suggested in figure 2, which is to begin by enhancing readiness for change, then create a clear rationale for change and examine current assumptions present in the school and how they intersect with the rationale established. Once the rationale and assumptions are clearly delineated, data should be collected to help determine the current state of functioning. Before rushing to make a decision about a particular program or practice, teams should examine the options available via school visits, visits to nonschool environments that are relevant, and consideration of other data sources such as journals, articles, professional conferences, and existing successful programs and practices in the school.

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* Conley, David. *Are You Ready To Restructure? A Guidebook for Educators, Parents, and Community Members.* Thousand Oaks, California: Corwin Press, 1996. 181 pages. ED 390 179. This book contains a more practically oriented discussion of how to increase readiness for change in schools, and it contains summarized versions of the twelve content dimensions of restructuring as well. It is designed for school-site councils, task forces considering change, school administrators, and others with responsibilities or interests related to restructuring.

This extensive process should help increase agreement among educators and stakeholders on both the need for change and the general strategies to be pursued. This stage is referred to as *institutional alignment*. An increase in alignment leads to a decrease in conflict and an increase in the rate at which change can occur.

A school can then adopt one of many possible planning models that enable a strategic direction and vision to be adopted more formally. This stage then leads to implementation activities, which ultimately lead back to enhanced readiness for more change.

Part 4 closes with a chapter that looks at where restructuring is leading. The first section summarizes several important research studies on the effects of restructuring. Then the chapter offers an institutional vision of restructuring from a national educational organization, followed by my own more personal conjectures about how education might look differently if restructuring succeeds and if many of the trends identified in this book come to be implemented. These visions are meant to stimulate discussion and, hopefully, inspire those engaged in change to continue the difficult task they have chosen.

CHAPTER 21

CREATING READINESS

When schools undertake significant changes, they generally simply begin where they are and proceed from there. The focus is on a specific program or structure, and change is generally defined as an implementation problem: How can the desired (or mandated) program or structure be put into place? Furthermore, the unspoken text accompanying implementation often is: How can the change be made with minimal effect on existing assumptions, practices, and beliefs?

Change, then, is viewed as a technical problem, as something that is accomplished when the right combination of information and training is provided to those expected to implement the change. The mindsets of those people are generally taken into account after the fact, if at all. Those who do not implement the program are often categorized as resistors. In fact, they might be resistors, or confused, or unaware, or have any of a dozen agendas that shape their initial reaction to a proposed change. The school administrator is then in the position of reacting, trying to manage the resistance that the change engenders.

How can schools approach change, particularly large-scale change, from a perspective more likely to result in successful implementation and strengthened organizational culture? How can the change process be organized and anticipated so those leading it can avoid being placed in reactive roles? One key strategy is to encourage readiness for change within a school independent of any specific new program or structure. This state of psychological openness to change is called *readiness*. School leaders can do much to enhance organizational and individual readiness for change.

CREATING READINESS FOR RESTRUCTURING

Readiness is an elusive and little-examined dimension of the change process that becomes much more important as the magnitude of the change increases. Fullan and Stiegelbauer (1991) remind us that "above all planning must consider the pre-implementation issues of whether

416

and how to start, and what readiness conditions might be essential prior to commencing."

If people are being asked to make a small change in their routines and practices, little readiness is needed. Written instructions delivered impersonally may be entirely adequate, for example. However, when the nature of the change is substantive, very different procedures are suggested. In such a context, readiness for change becomes its own independent dimension of the change process.

Many school leaders appear to misjudge and underestimate the amount of time and energy that must be spent on readiness. The leaders have already adjusted their world view and accommodated themselves to the change they are proposing. More importantly, they can see how they will succeed, or at the least survive, after the change has taken place. They can put what they are suggesting into a broader context and are comfortable that they understand most of the predictable ramifications of the decision to change. They have been able to adjust their mental model of the world to accommodate what they are proposing.

For many, perhaps most, of the people in the organization who are being asked to change, this level of awareness simply does not exist, nor can it exist without difficulty. Readiness is not achieved by simply providing information to participants and answering their questions regarding how the changes will affect them. Ultimately all participants need the opportunity to engage actively with the change process at a different, more fundamental level. They need to be given the opportunity to understand the rationale for change, the conceptual framework within which it exists. Readiness activities are those that allow participants in fundamental change to have the opportunity to reshape their mental model, their world view, to accommodate the proposed changes, and, most importantly, to understand how they will be able to survive and succeed in the new environment.

Schmidt and Finnigan (1992) discuss the difficulties and dangers of systems-level transformative change. They suggest that the leaders in an organization make certain they are prepared to develop a knowledge base in each of six key areas before they begin a transformative-change process:

1. Understanding the dynamics of organizational transformation
2. Assessing your organization's readiness for change
3. Assessing your management team
4. Reviewing your own leadership style
5. Learning from other organizations' experiences
6. Getting started (p. 89)

Schmidt and Finnigan emphasize that organizations are social systems. They take input from their environment, process it, and deliver output. Systems are made up of interdependent component parts that shift or adjust to accommodate the demands of the environment but do not necessarily coordinate these adjustments. The adjustments function primarily to maintain equilibrium, or the status quo. Changes in one part affect all others in unintended, uncontrolled ways. Organizations maintain equilibrium only through the expenditure of great amounts of energy. All change requires energy. In times of rapid change, it makes sense to enable the organization to become inherently more adaptive, manipulating the flow of energy so that it does not go primarily toward a return to equilibrium, but rather toward enabling the organization to become more adaptive as one of its integral features.

Significant change is difficult in any organization, say Schmidt and Finnigan, who describe some of the factors that leaders might keep in mind when preparing change strategies:

> Because changes are disruptive, many people naturally resist them. Some of the factors that must be taken into consideration are these:
>
> - The level of dissatisfaction with the present situation
> - The cost of change (short-term and long-term)
> - How well people understand the proposed "future state"
> - The consequences of not changing
> - The clarity of the path for changing
>
> In general, people will support a change if (1) they are convinced that the present situation is not desirable; (2) the proposed "future" is clear, sensible, and desirable; (3) the path toward the future is clear and realistic; and (4) the cost of the change is not too high....[T]his involves asking four critical questions:
>
> - How will the people in the organization be affected by the change? What will they gain and what will they lose?
> - How clearly do they see the advantages of the changed situation?
> - How dissatisfied are they with the present situation?
> - How prepared are they to take the first steps to bring about the change? (p. 94)

The Concerns-Based Adoption Model (Hord and others 1987) suggests seven stages of concern that teachers may go through when implementing an innovation. The research done to develop this model focused on how teachers responded to discrete educational innovations, such as a new curriculum. In that sense the model may be of less value in understanding large-scale systems change. However, there are many lessons from the CBAM model that appear to be relevant.

The first five stages—awareness concerns, informational concerns, personal concerns, management concerns, and consequences concerns—relate most directly to issues of readiness. Although in the CBAM model some of these stages of concern—most notably management and consequences—were to be addressed in the context of implementing a specific program, they are also informative of the issues that need to be addressed before any major change is undertaken. The additional two stages of the model—collaboration concerns and refocusing concerns—while important to consider, are not directly related to readiness issues. Hord and others (1987) suggest ways to address concerns at each of the first five levels. The following statements relate specifically to readiness concerns and represent a subset of all statements offered by Hord and others.

> *Stage 0—Awareness Concerns*
>
> - If possible, involve teachers in discussions and decisions about the innovation and its implementation.
> - Share enough information to arouse interest, but not so much that it overwhelms.
> - Acknowledge that a lack of awareness is expected and reasonable, and that no questions about the innovation are foolish.
> - Encourage unaware persons to talk with colleagues who know about the innovation....
>
> *Stage 1—Informational Concerns*
>
> - Provide clear and accurate information about the innovation....
> - Have persons who have used the innovation in other settings visit with your teachers. Visits to user schools could also be arranged.
> - Help teachers see how the innovation relates to their current practices, both in regard to similarities and differences.
>
> *Stage 2—Personal Concerns*
>
> - Legitimize the existence and expression of personal concerns....
> - Use personal notes and conversations to provide encouragement and reinforce personal adequacy.
> - Connect these teachers with others whose personal concerns have diminished and who will be supportive.
> - Show how the innovation can be implemented sequentially rather than in one big leap [when this is possible]. It is important to establish expectations that are attainable.

Stage 3—Management Concerns

- Clarify the steps and components of the innovation....
- Provide answers that address the small specific "how-to" issues that are so often the cause of management concerns.
- Demonstrate exact and practical solutions to the logistical problems that contribute to these concerns.

Stage 4—Consequence Concerns

- Provide individuals [with concerns about consequences] with opportunities to visit other settings where the innovation is in use and to attend conferences on the topic.
- Don't overlook [individuals with consequence concerns].... Give them positive feedback and needed support.
- Share with these persons information pertaining to the innovation. (pp. 44-45)

While this model is useful as a framework within which strategies to support change can be considered more systematically and thoroughly, restructuring may not lend itself to such a linear approach to change. Much of what comprises readiness is spread among the five levels presented in the model. Consequently, several issues often must be addressed simultaneously before any consideration of a specific innovation can, or should, begin. For example, it may not be possible to answer all questions regarding the use of a new technique, such as authentic assessment, or of a new structure for time, such as block scheduling, before it is implemented. Furthermore, in some cases there are few models to observe or learn from, and some types of change cannot occur in increments; teachers must make the transition all at once if they incorporate different strategies of scheduling or grouping, for example.

The net result is that careful, predictable, staged strategies for change are of less value in such an environment. This is not to say that they are without use. The point is that much of the work necessary to ensure the success of large-scale change occurs before the innovation(s) are ever put into place. Helping participants develop a new world view and showing them how they will function effectively and successfully within this new context are key dimensions of ensuring success.

In addition to the suggestions contained in the CBAM model, there are other things school leaders can do to create readiness for change. The following sections outline a series of activities that can be undertaken to help create and nurture a mindset that supports change and that sees what is both possible and necessary. The first strategy is that of visiting other places to help break down the insularity that often exists within a school and to broaden the school's world view.

VISITING SCHOOLS, AGENCIES, AND BUSINESSES

One effective means of building readiness is to provide staff the opportunity to visit other places that are actively involved in restructuring. Sometimes these observations embolden visitors with more resolve to change their own schools; other times they leave educators wondering why they even bothered to visit the site. Such visits can give educators a better sense of how (and why) their school should change its practices, or can lead to a rejection of restructuring by teachers who participate in the visit. Without careful selection of visitation sites and proper preparation for those who visit, the value of such visits is greatly diminished. I begin by describing how to visit pioneering schools, then consider the value of visiting noneducational settings.

GUIDING QUESTIONS FOR VISITORS TO SCHOOLS

Chenowith and Everhart (1991) suggest that visiting a restructuring school is like visiting a foreign country. "We liken the school visit to a visit to a foreign land.... [T]he practitioner is much like a tourist who is not familiar with the local customs and thus will find that a well-designed tour book is of considerable assistance." The "culture shock" that can confront visitors can be a powerful tool in enabling them to rethink the educational structure and methods within their own building.

Chenowith and Everhart offer a "guide book" for visitors that discusses the meaning, organization, and effects of change. The following summary of these three areas suggests the type of questions visitors should be asking, and the kinds of things they should be looking for as they undertake their visit to a "restructured" school:

The Meaning of Change

- *Readiness for Change:* ... Staff should want and choose to change.... [W]hat proportion of staff are dissatisfied with the previous or present situation? What proportion of staff is supportive of the restructuring effort? What proportion of the staff is willing to risk new action on behalf of the school and willing to undergo training for new skills and behaviors?
- *School Vision:* ... There should be a clear school vision.... [W]hat is the school's "formal doctrine"? What are its statements of intentions, public announcements, promises, etc.?... [A]re the principal and teachers able to articulate the school's mission and goals? Is there a shared sense of purpose?
- *Language:* ... Is staff language "received," full of slogans, generalities, and a "party-line" or is it "interpreted" and full of the staff's own words

and meanings?... Do staff talk about their future actions generally and abstractly or speak more specifically and behaviorally? Is staff language full of simplistic terms or is it dense, full of terms portraying more complex relationships? Are there physical displays and representations of language such as posters and banners portraying the school's mission statement and goals?

- *Understanding:* ... Do the principal and staff understand the complexity and delicate nature of the change process? Do staff have access to specific skills and knowledge necessary for a successful implementation? Are the staff able to articulate or describe a theory of knowledge upon which the innovation is based?
- *Early Success:* ... Are there notable examples of success? Are the principal and staff confident and do they possess a sense of efficacy and job satisfaction? Is the school staff aware of both short- and long-term objectives?

The Organizational Structure of Change

- *Organization and Governance:* ... How are decisions made and who makes them? Are there procedures and processes for problem solving and school-based inquiry? What incentives or rewards exist to encourage a change in organizational behavior?
- *Culture:* ... Is collegiality evident through mutual sharing, assistance, and joint work?... Is there fragmented individualism (traditional isolation), Balkanization (subgroups and cliques), contrived collegiality (unwanted contacts and use of scarce time), or a truly collaborative culture (deep, personal, and enduring)?... Do staff have adequate communication and group process skills? Are staff members able to work with diverse views? Are there norms of perseverance, self-disclosure, and acceptance of outside help?
- *Instruction and Curriculum:* ... Are instructional practices teacher centered or do they include opportunities for cooperative learning, peer and cross-age tutoring, and increased student responsibility? Does the curriculum present concepts in the abstract or are concepts applied to real, personal, and concrete experiences? Does the curriculum require changes in teacher organizational structure or merely permit traditional patterns to persist?
- *Feedback and Evaluation:* ... Does the school openly solicit diagnostic information from multiple sources? Does the school reflect upon its practices? Does it tend to create more questions than provide answers?
- *Support:* ... Are adequate financial and time resources available? Is there support from key administrators in the district? Is the required technical knowledge available and accessible? Are parents informed and involved? What sort of press coverage or information has the community received about the program?

The Effects of Change

- *Active Learning:* ... Do students take an active role in learning or do they largely "consume" what teachers have planned for them to do? What proportion of time are students involved in such an active framework? What are some examples of the student activities that are part of such an active framework?
- *Student-Centered Learning Agendas:* ... [D]o students help define appropriate elements of the learning agenda... Is participation varied and appropriate? Do students understand how to organize such agendas? What activities illustrate such student-centered agendas?
- *Positive Regard for Students as Learners:* ... Is a high degree of self-esteem evident both in and out of class? Do students evidence a healthy respect for their role as students?
- *Clarity of Role:* ... How do students define their role as students *vis a vis* teachers, administrators and others? How do students visualize the role behavior of others who are supposed to improve their own learning?
- *School Context:* ... Do learning experiences in which students are engaged show evidence of the social context within which learning is involved, or are learning experiences predicated on assumptions of students as individuals? Is there evidence of a mutually supportive learning community? (pp. 8-16)

A visitor must look beneath the surface to understand the effects of restructuring. Understanding why people chose to do what they did can be as valuable as understanding what it is they are doing. It is particularly difficult to observe "learning" taking place. The learning process is elusive. Teachers often talk about how they seek "the teachable moment." What is the likelihood of observing one on any given visit?

However, a careful visitor can learn to see beyond the immediate events and activity of the classroom, be it immaculate or cluttered, beyond the "official" descriptions of the school offered by the host, beyond any prepared written materials that extol the program by describing the ideal version of it, to learn valuable lessons and glean useful ideas, both in terms of what to do and what not to do.

Here are some additional examples of things I look for when visiting a school engaged in restructuring or any major change:*

- a clear emphasis on improved student learning as the ultimate goal of the restructuring program, and a way to document success, not just process

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* This list is an adaptation of a version that appeared first in *Are You Ready To Restructure? A Guidebook for Educators, Parents, and Community Members.* Thousand Oaks, California: Corwin Press, 1996. 181 pages. ED 390 179.

- the ability of teachers and students to describe what they are doing that is different from what they used to do, and why they are doing it
- evidence that all or nearly all the students are productively engaged in learning and understand what is expected of them
- evidence that the restructuring program extends beyond a few teachers, classrooms, or one program in the school
- students who are enthusiastic and excited and who can explain the program's strengths and weaknesses
- an effective system for tracking student progress in a new way consistent with the program's (or school's) restructuring goals
- a comfortable atmosphere and a relationship of trust and respect between learners and adults
- a physical environment that suggests the people in it have some sense of community or belonging

Other, less tangible things I look for include:

- evidence of buy-in among most staff, not just the innovators
- parental involvement in program design and functioning
- community support for the program
- a rational process by which agreement was reached on the program, including some reference to research or evidence that the program is likely to be effective
- the ability to conduct the program or approach within the school's existing resource base, if not now then at some identified time in the future
- evidence that the program is not so dependent on one individual that it is unlikely that anyone else could duplicate the effort
- the amount of time and skill necessary to conduct the program (Is it such that average faculty would be incapable or quickly burned out?)

A quick visit to a school with a reputation for restructuring can be useful if the visitor looks beyond the surface, not evaluating the program in absolute terms, but understanding the effects of the philosophy and program in relative terms.

Learning is inherently difficult to observe; it occurs at the most unexpected times, and there is often no outward sign that it has occurred. Careful observation can strengthen an observer's confidence that he or she can discern the link between the environment and processes used with the learner and the likelihood that learning is occurring. Observers should clearly understand the outcomes the school is seeking, since these may be different from the outcomes actually observed. Given the relative openness of schools to visits (compared to some segments of private industry where new techniques are hidden from competitors), staff at schools trying new programs and approaches have much to gain through visiting other schools. If visitors do not expect to see schools that have solved all of education's problems, but have taken a solid first step toward a new vision of teaching and learning, they will gain much. This form of dissemination is described by DiMaggio and Powell (1983) as "institutional isomorphism," the tendency for noncompetitive organizations to look to one another for solutions and to adopt approaches developed and piloted by innovators. Since schools demonstrate the characteristics of institutional isomorphism, visits to the many "lighthouse" schools making early strides in restructuring may be critical to the ultimate success of school restructuring at any given site.

VISITING SITES OTHER THAN SCHOOLS

As valuable as visits to schools are, they rarely cause teachers to move too far outside their current views of schooling. They remain within their "comfort zone" while visiting, and can be quite judgmental about their colleagues at other schools. An additional way to expose teachers to new ideas is to have them visit settings totally outside the educational system. The most likely candidates are businesses and governmental agencies.

A visit to a business can be an eye-opening experience for a teacher. Most like getting a look at how "the other half" lives, and most come away feeling more secure about themselves as professionals because "business doesn't have all the answers." At the same time, teachers tend to learn a great deal from a properly structured visit.

Setting up a visitation takes careful planning. The right setting must be selected first. Generally this is a company that has redesigned itself into work teams, that demonstrates how business is becoming global, that is innovative in the way it structures time or other aspects of work, that develops its employees, or that has in some way rethought the traditional ways to organize people. Furthermore, it must be a site where at least one key person is very interested in education generally and preferably in education reform or restructuring specifically.

Most visits involve tours and discussions between teachers and company personnel, but many go beyond this model. Some companies allow teachers to work alongside their employees, if only for the day. Others rotate the teachers through a series of tasks within the company. When a company has its own corporate trainers, it may have them discuss their worker and management training programs with educators to see how each approaches the task of teaching. Personnel directors can have teachers take the tests and fill out the forms that job applicants would complete, or learn about the difficulties employees have and how prospective employees could be better prepared to help them avoid these difficulties.

All of these activities would be one or two days in length generally. There are other options that extend to a week or more. One company rotates several teachers through all the basic job levels in the organization over the course of a summer, and requires the teachers to present to the CEO of the company a report summarizing their observations and making recommendations to improve the company. Other short-term internships pair teachers with employees to work jointly on a specific report or study that they complete in the allotted amount of time. Each contributes her or his expertise; each is valued; the teacher comes to understand the dynamics of the company first-hand. The company comes to appreciate the skills of educators.

All visitations, whether short or long, require some sort of summary debriefing at the end of the day or period of time. In most cases the teachers produce a report on the spot or shortly thereafter summarizing their insights and observations in two categories, as they relate to (1) what students should know, and (2) how faculty and staff could be organized best to meet their job requirements and student needs. These reports are shared with the host and with other teachers at the school. Observations common to the reports are captured with the goal of injecting them into discussions about restructuring at the school.

OTHER ACTIVITIES TO BUILD READINESS

Schools already conduct many activities that can contribute to readiness. However, often these activities are not linked in participants' minds to any overall strategy for change. The following categories of activities provide some examples of the ways in which schools can utilize structures and activities that are familiar in order to build readiness for more fundamental change.

- *Study groups.* Carefully selected groups are given a broad charge to explore. This group does not make a specific recommendation, and often the goal is as much to raise the awareness level of the group members as it is to come up with a specific program or recommendation for the school.

- *Task forces.* Groups can be given a more specific charge to investigate a topic and return with a recommendation for action. It is important that the task force be seen as legitimate by faculty, and not a vehicle for the principal's will.
- *Collecting data about the school and sharing it (profiling).* Data can be threatening to people in organizations like schools that are not used to thinking in terms of accountability for their actions. And yet, data can help illuminate areas where energy should be focused, if they can be presented in a fashion that engages discussion and problem-solving rather than recriminations.
- *Book discussion groups.* Educators need opportunities to engage in reflection and analysis one step removed from application. Too much of education is application of ideas before those who apply them totally understand them. Discussion groups provide a forum for initial understandings to develop. They also enhance collegiality of a faculty and offer a safe setting for differing philosophies to be aired and debated.
- *Thought-provoking materials.* Many sources exist to provide examples of successful programs. These materials can be made available informally in staff rooms or other settings where teachers may review them informally. Some resources may be directed to specific teachers by an administrator or teachers charged with building readiness.
- *Articles about effective educational methods and models.* Numerous professional journals produce stimulating articles each month. Rarely do teachers peruse these sources. Readiness can be increased when someone or some group at the school takes the initiative to identify the most relevant or interesting articles and make them available to staff. The first step is to have subscriptions to key sources of new ideas.
- *Binders.* Organize them into sections where teachers put abstracts of articles on new programs and ideas, the contents of which are shared periodically. As more articles are accumulated and books read, faculty who do the reading agree to provide brief abstracts that are centralized into a binder for review by individual teachers or task forces. This form of "group learning" helps the school become a "learning organization."
- *Attendance at conferences and special events.* Although the idea of teachers attending conferences is not new, the value gained from such attendance can be maximized in schools where those who attend have some obligation to report back to their colleagues on what they learned, and where those who attend are selected based on some criteria other than who went last time. Such a process helps encourage the dissemination of ideas and stimulation of professional growth.

- *Yearly events like retreats.* Such experiences enable faculty and community to come together and step back from day-to-day issues to consider the "big picture." Although retreats are difficult to organize and sometimes inconsistent with the culture of the school, even limited offsite meetings, perhaps at the principal's or teacher's house, can be a time for new communication as the normal methods and structures, such as faculty meetings, are temporarily abandoned and new structures are formed. A good facilitator is quite useful in such settings.
- *Regular time at faculty meetings to consider new ideas.* Even faculty meetings can be used to help increase readiness if one standing item on the agenda is a brief consideration of a new idea. This may take the form of a report, distribution of an article or abstract, example of a new program, or results of a school visit. The simple act of continuing to introduce new ideas regularly helps create readiness for change.

THE PHASES OF READINESS AND BEYOND

Numerous strategies have been suggested as templates for large-scale change in schools. Indeed, it would be naive to think that a single formula or procedure could work in all situations and settings. Howard (1991) identified a nine-step process from work he performed with Colorado schools that is sufficiently general to encompass many of the key activities and steps present in most descriptions of successful school-restructuring processes. The steps of this process are adapted extensively here. The process is divided into four phases: readiness, data collection, alignment, and action planning and implementation.

READINESS PHASE

1. Systematically increase awareness of the need to consider large-scale change. Provide information to staff members, parents, students, key community leaders, and the superintendent's office regarding the need for schools to restructure. Such information will include sources on changing economic, demographic, social/political, and technological trends, along with consideration of societal values, available resources, community structure, and so forth.

2. Develop group agreements. Through the school's usual decision-making processes and special events focused on creating the ground rules for change, develop a commitment to pursue restructuring within specified guidelines or group agreements. These agreements are not specific programs or courses of action, but general parameters applied no matter what change is being considered, adopted, or implemented. Do not label as "the enemy" those who do not want to participate or who raise questions. Work to find ways to involve all staff and the community by creating many possible ways for individuals to participate.

3. Create numerous ways for people to participate. Organize a development team to provide overall coordination and guidance. Educate team members about the restructuring process and about their specific roles in bringing about restructuring. This is a working group, not an advisory group. Develop clear procedures for selecting team members, make responsibilities explicit, establish timelines and reporting procedures, and establish group norms before the committee's work begins. Organize other specific activities and structures that allow many more staff to become involved with varying degrees of commitment and energy.

DATA-COLLECTION PHASE

4. Develop an information base. First, gather baseline data on quality indicators that may have an impact on student learning and that can be affected by restructuring. Such indicators come from sources such as archival records, surveys, self-reported behavior, classroom observation, focus groups, and interviews. Often this will require the school to learn how to collect and organize data initially.

Second, have the development team and other interested faculty identify articles, books, reports, videotapes, and other sources of information that would help teachers reconceptualize their school. Have team members and other interested faculty (including some who might have been skeptics initially) attend conferences, visit other schools, or spend time at local work sites to obtain new perspectives on student needs and teacher roles. Involve as many staff members as possible in these activities. Data should be summarized in a form readily available to all. Many opportunities should be created for the school community to consider the data and its implications.

ALIGNMENT PHASE

5. Develop a statement or a clear, concise overall goal and direction for the restructuring process, a framework for restructuring. Have the development team do the initial work on developing a "set of educational specifications for the restructured school" (Howard). Components of the framework statement may be organized using the Dimensions of Restructuring model. The statement may include possible courses of action in each of the twelve variables, as well as general recommendations for the variable groupings (central, enabling, and supporting). The team also should identify implications for the school as it is currently structured. Implications must include an analysis of what skills and knowledge all students will be expected to possess upon completion of the course of study at the school (educational standards), along with suggested strategies for assessing student success in achieving these outcomes.

6. Assess faculty perceptions of the initial draft of the framework. Ask each faculty member to rate each element of the framework statement in terms of "what is," "what should be," and "what could be." This measures the extent of agreement among respondents and their sense of the challenge of the restructuring process. Allow for adequate discussion of the implications of the proposed framework. Revisit the group agreements to make sure participants feel these agreements have been honored in the process. Once a framework has been formulated, ask each faculty member to write a personal statement identifying the implications of the framework for his or her instructional practices.

7. Set priorities and identify activities to enact the vision. Convene a broad-based planning team comprised of members of the development team, other interested faculty, key community leaders, student leaders, parents, and others to identify elements that should be included in the school's action plans for beginning to move toward implementing the framework. Refer the work of this group to the faculty and community for review before implementing its recommendations. Once again, consider these activities in relation to the skills and knowledge all students are expected to be able to demonstrate. Will these activities result in students who meet the specified standards?

ACTION PLANNING AND IMPLEMENTATION PHASE

8. Develop detailed action plans, implement, monitor, and modify. Form three to six task forces roughly encompassing the twelve dimensions of restructuring. There should be at least one task force each for the central, supporting, and enabling variables. Additional task forces might concentrate on specific issues or programs within these areas or on projects that cut across all three dimensions.

9. Evaluate and report outcomes. Frequently assess and monitor the progress that is being made, both in terms of the specific projects being undertaken and changes in student learning outcomes. Be prepared to use different measures of student learning than are currently employed. Circulate this information widely and be prepared to modify your vision based on feedback. Link the information to the baseline quality indicators previously established and to the explicit student skill-and-knowledge outcomes identified throughout the process.

There are many possible variations on the process just described. Its primary elements—common to most good approaches to planning—include a review of the external environment and its probable impact on the school, an analysis of current practices and their effectiveness, a consideration of the thinking and writing on current best practice, and an orientation toward inclusive models of decision-making.

An alignment framework, however well drafted, is only a starting point in a very long process. Some schools have conducted highly successful vision-building sessions but never moved beyond that point. While the process of creating alignment and some consensus on the need to change can be, and frequently is, a means by which to increase communication and interaction among staff, it should be viewed as a means to an end, not an end in itself. In this sense, it is probably not desirable to say that the process is more important than the product: both are important. The purpose is to create alignment of effort toward and ownership of the goals of change, not simply to improve staff relations.

The next stage beyond agreement on the need to change is creating a sense of the possible and some ground rules for the process of change. The following chapter describes several different ways to capitalize on the readiness created through the techniques just presented.

INCREASING ALIGNMENT AND BUILDING A VISION

A fundamental question to be asked before restructuring activities begin is whether the school is ready to attempt such a challenging, arduous process. Many times a highly motivated leader or group of leaders within a school has pushed strongly for the school to restructure, in spite of the wishes of most staff and community members. Although there is sometimes reason to be a "voice in the wilderness," particularly in situations where staff are too self-satisfied to ever change, there is also danger. The backlash to the "heroic leadership" model of change can be so strong that it delays serious self-examination of a school's assumptions and practices for several years or more. Such a backlash can even eliminate the word and concept "restructuring" from the school's collective vocabulary.

One way to build a solid foundation for educational redesign and to avoid the possibility of actually retarding the process of change in a school is to begin by discussing prerequisites to restructuring. This method allows the faculty and community to explore the implications of change and to establish the ground rules before beginning the process itself. Behaviors (and memories of what was agreed upon) often change when it is time to begin to implement new programs and structures. Making a commitment as a faculty to a series of principles can help create a forum for individuals to raise concerns and fears, as well as to begin to create a sense of common purpose. Simultaneously, such a process begins to awaken awareness by all participants of the scope of change being contemplated and the eventual repercussions of undertaking such an ambitious challenge. This awareness is an important psychological dimension to creating readiness for restructuring.

There are many names for this process of establishing the prerequisites for change. Some call this the creation of group agreements. Others talk of identifying the norms of the process. I label these framing statements "commitments" to suggest they are more than guidelines; they are the principles all participants agree to honor throughout the change process. In fact, these commitments may be raised and reviewed

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periodically, particularly when difficulties are encountered. They serve to refocus the group's efforts and to eliminate needless misunderstandings.

THE TEN COMMITMENTS: PREREQUISITES TO RESTRUCTURING

The following ten statements are derived from research on the restructuring process specifically, and on change in organizations generally. These statements might be used by a school's faculty to help determine if they are ready and willing to continue a process of fundamental self-examination. The statements, which I have dubbed the Ten Commitments, cause staff to reflect on their values, the school's culture, and the process to be followed if the school chooses to begin or continue a restructuring process.

These ten statements are designed to be presented to a faculty as a whole for consideration and adoption before any comprehensive program for school restructuring is initiated. Generally, a committee of the faculty would have met to develop such a list, which the committee would present to the faculty at a time and place where there was adequate time to discuss the statements and their implications.

1. We commit to using data to make decisions. Staff will employ information on current school processes and outcomes, best educational practices, and societal trends as their frame of reference when making decisions. This analysis involves identifying what is not working along with what is working. It also involves acquiring the skills necessary to collect and analyze data.

2. We commit to creating and sustaining a culture of continued self-examination, extensive and continual professional development, and experimentation. In many schools, these are optional activities. In a school undergoing restructuring, faculty must lend their support for professional growth, both in principle and practice. If a school is to reshape itself, its staff members will have to be willing to examine their current practices and to acquire new skills and techniques. An important qualification is that this commitment to self-examination and professional growth will not result in any information being used against an individual.

3. We commit to accepting that there are aspects of the learning environment that prevent or limit student learning. Because education is such a complex process, there can be a tendency to blame the learner for his or her own problems and failures. Sometimes failure is attributed to the child's home environment or economic class, or even, perhaps unconsciously, to the child's race or sex. All these explanations end up removing the school and the teacher from a position of responsibility for the success of the student. Although many children do bring difficult, almost intractable problems to schools, these cannot be accepted as an explanation before the fact for lack of student success. The third commitment implies that everyone in the school must know that they have done everything in their power to help the student succeed before they attribute responsibility elsewhere. They must do everything possible to alter the design and practices of the school to meet the real needs of their clients before they assign blame to those clients.

4. We commit to viewing children as human beings first, students second. In the final analysis, the most vital and important activities in education are those that occur during face-to-face interactions between teachers and students. Technology, innovative schedules, governance structures, and teaching materials are only marginally relevant if the quality of the human interactions that take place in the classroom are inadequate. The ability to transmit knowledge of content alone is not considered to be adequate to fulfill the expectations of the role of teacher. A primary prerequisite of learning is that students know that teachers care about them. Will the school be willing to assess the ways in which students are treated as human beings? Is the school organized in ways that allow adults and students to interact with one another as human beings?

5. We commit to learning and employing a broad range of instructional methods and formats. If schools restructure, teaching methods will become more varied than what has been the case. Goodlad (1984) found that the vast majority of students spend the vast majority of their time in passive roles, either listening to lectures or doing seatwork. If this commitment is made, instructional techniques will be selected and employed based on the needs of learners, not on the limited range of strategies the teacher has mastered. Will teachers be ready to expand their instructional repertoires not only by attending inservice trainings, but by making the much more important commitment to put new practices into place?

6. We commit to eliminating or phasing out those elements of our program that are not the best and most appropriate learning experiences for our students or best use of our limited resources. This commitment is very difficult for educators to make, since eliminating or phasing out any program or task generally means hurting a colleague. That is why it is very important to make a distinction between the person and what they do or teach, or between the person and the program being considered for elimination. Very often the individuals who might be affected are highly skilled and dedicated; the problem is that what they do may no longer be the best use of their time or the resources allocated to the task or program in question. Thus it is important to honor the person and make it clear they are still a valued member of the organization.

Given the goal conflict and ambiguity that exist in most schools as they attempt to be all things to all people, it becomes ever more urgent for educators to agree on what no longer belongs in the curriculum or school program. If schools continue to face stable or declining resource bases and increasing expectations for performance, resource reallocation is the only viable strategy for improving educational processes and outcomes. Learning how to do this may be traumatic for educators, but if everyone understands that such a process will eventually be necessary, staff will be more aware of the importance and gravity of decisions to restructure, and will not be as surprised when such a process is initiated.

7. We commit to viewing parents and community members as equal partners in the education of children. This is a concept to which lip service is often paid. In practice, however, schools have established many structural barriers to parental participation. Are staff members willing to change this relationship and expect parents to be equal members of a team whose goal is to educate children? Particularly in situations where staff believe that more parental and community support for education is vital to their success, the commitment to include these groups, and to be more accountable to them, has to be seen as part of the bargain in getting their involvement, ownership, and participation in education.

8. We commit to involving staff in decisions that set the direction for change in the school. Schools cannot be restructured without the active cooperation of teachers. Although new governance structures in and of themselves cannot transform schools, it remains equally clear that schools will not change if teachers do not take ownership of and responsibility for new educational goals, methods, and structures. With this in mind, it is important for teachers to be actively involved in decisions that will change their work environment and job descriptions. This commitment assumes a genuine desire to use input in decision-making as a tool for change, not for obstruction.

9. We commit to establishing a shared vision and set of goals for the school, a framework for educational redesign. Evidence that many schools lack clear purpose or direction seems to be mounting at the same time that the need for clarity of focus increases. Much of what occurs in schools is fragmented or even contradictory. Are staff willing to spend the time and make the commitment to develop some common direction that reflects shared beliefs and values about the purposes of an education? Are they willing to make decisions and judgments based on this framework first and their personal agendas second? Are they willing to focus their individual and collective vision on improved student learning?

10. We commit to helping adults who are threatened or challenged by changes occurring in the school. In return, all adults in the school agree to be supportive or constructively critical once decisions have been made openly. It is not reasonable to ask people to change if they will be worse off as a result of their willingness to do so. Will the organization commit to providing resources for members who are at a disadvantage as a result of change? Will procedures be developed to ensure that staff will not be asked to do things or make decisions that are against their own best interests? Will those negatively affected be provided assistance? If so, the system may ask in return that after a certain point all members of the organization line up behind the new goals, purposes, programs, and structures of the school, or suggest how better to accomplish these aims.

Open, participatory decision-making (as specified in the eighth commitment) provides a forum within which concerns can and must be aired. It is not acceptable to ignore the existing decision-making structures and work against change. Setting this ground rule can help diffuse much of the passive-aggressive resistance that can sabotage educational-change efforts.

KEY QUESTIONS TO FRAME RESTRUCTURING EFFORTS

After a faculty has succeeded in developing a strong sense of direction and identified where they are and where they want to be, what is the next step? All indications are that this next step varies from school to school. But in practice most programs of educational restructuring move immediately to develop programs or projects of some sort based on the vision.

Rather than rushing headlong to implement the most immediate or fashionable educational innovation or available program, educators might benefit from considering the range of changes their school might need to make. Faculty might begin the change process by asking questions rather than embracing solutions. This section provides examples of questions schools might ask, dimensions they should consider, and principles they might discuss as they begin to think about their vision of restructuring. They can generate faculty discussion and analysis of current practices when a school is ready to consider taking "the next step." The discussion of these questions, while potentially painful, helps foreshadow the tasks ahead.

Appendix A contains a copy of these questions in a format that allows faculty to indicate the degree to which the school meets the criteria suggested in each question.

The questions are organized around the twelve dimensions of restructuring presented in part 3. They suggest the areas where data might be collected regarding current practice, or where research on best available practice might be focused. They provide the framework within which goal-setting can take place after sufficient time for reflection on possibilities has occurred.

These questions suggest far more change than most schools can sustain. They do, however, offer a broader view of possibilities than can be generated from a brainstorming session, or from attendance at an educational restructuring conference. They are designed to cause a faculty to collect data and to test the accuracy of their assumptions before they proceed with restructuring.

Performance Standards

- Are learning standards specified? Do they form the basis for assessment?
- Are the standards consistent with the vision and goals of the school?
- Were the school's standards developed with broad community involvement, and with reference to the skills students need to succeed in the future?
- Are the standards a combination of intellectual processes, skills, and content knowledge that provide a clear framework within which assessment can occur?
- Are the standards clear to teachers, students, and parents?
- Are the expected learning performances cumulative throughout a child's education, kindergarten through graduation? Are there benchmarks that suggest the acceptable range of performance at various ages?

Curriculum

- To what degree is the content knowledge contained in all courses accurate and up-to-date?
- Does the curriculum prepare learners for the future?

- Does the curriculum consciously balance basic factual knowledge and higher level concepts?
- Is the required course of study consistent with the school's vision?
- Is the curriculum designed to build outward from students' life experiences and learning opportunities that surround the school?
- Do different social/ethnic/economic groups learn substantially different content?

Instruction

- Are students active participants in classroom activities and in choosing how they learn?
- Are individualized learner goals developed?
- Do students develop individualized plans broader than specific goals that suggest where they are headed with their learning?
- Is factual information used as a foundation for developing higher level concepts, rather than as an end in itself?
- Do the learning tasks cause the learner to integrate information and concepts across disciplines?
- Do real-world problems serve to focus and apply lessons and material taught?
- Is instruction designed so that all students can potentially succeed?
- Do members of different social/ethnic/economic groups work together cooperatively to solve problems and apply knowledge?

Assessment

- Are curriculum, instruction, and assessment clearly and consciously linked in the school's total instructional program?
- Are a variety of assessment methods used appropriately to develop a complex and accurate portrait of student performance and knowledge?
- Do teachers have the skills necessary to conduct complex performance assessment linked to standards?
- Does assessment include public demonstrations by students?
- Do students assess themselves at any point?
- Is there a data-management system for complex assessment information so teachers and students can determine what knowledge and skills need to be mastered next?

- Does assessment provide formative as well as summative data to students, parents, and teachers?
- Does assessment involve the application of information to solve real-world problems?
- Do students have any choices about how they are assessed?
- Do members of different social/ethnic/economic groups perform differently on particular assessments?

Technology

- Is technology used both to transmit factual information in a structured manner and to empower learners to explore and discover?
- Are teachers mastering and using technology personally?
- Is technology viewed broadly to include applications in addition to computers?
- Is appropriate software purchased along with hardware?
- Is appropriate training made available when hardware is purchased?
- Are curriculum content and instructional techniques changing in tandem with new technology acquisitions?
- Is the physical plant capable of handling the demands of technology (for example, electrical outlets, wiring for networks)?
- Is there easy and sufficient access to the Internet throughout the school?
- Are students taking advantage of learning opportunities offered via the Internet?

Time

- Is time being adapted to learning needs rather than vice-versa?
- Is time structured to respond to needs and realities of students' and parents' lives?
- Are staff and curriculum development preceding and accompanying changes in time?
- Is extra time being provided to those students who need it to reach desired or required performance levels?
- Are the boundaries of time being reconceptualized beyond traditional limits of 7 a.m. - 3 p.m., five days per week, 180 days per year?

- When new schedules are put into place, are the effects monitored to ensure the schedule leads to desired results, such as new teaching techniques?

Learning Environment

- Is the learning environment being designed with the needs and realities of the learner in mind?
- Is the learning environment perceived as extending beyond the classroom? the school? the community?
- Are grouping practices being reexamined to determine their effect on children from different social/ethnic/economic groups, and their effect on the school culture and climate?
- Is the learning environment being designed to maximize positive interpersonal relationships among students and between students and adults?
- Are curriculum, instruction, and assessment changing in ways that support and take advantage of any changes in the learning environment?
- Are new educational structures and a wider range of options for learners being designed and put into place?
- Can students move among learning environments within a school and between schools?

School-Community Relations

- Are parents being included as partners in the establishment of goals for their own children?
- Are parents provided enough information of the right sort to participate as partners in the education of their children and the running of the school?
- Are the needs of parents considered in the organization of the school and in the expectations held for parents?
- Do parents have choices regarding the schools their children attend and the programs within schools in which their children can participate?
- Is the broader community invited to participate in specific ways?
- Are there specific ways that parents and community members can be involved in key decisions regarding the school?
- Is the community involved in and informed about changes in the school?

- Is the business community consulted on curriculum that relates to career preparation?
- Are the critiques and criticisms of public education raised by various business groups and business people taken seriously?

Governance

- Is decision-making participatory?
- Are decisions made in relation to a vision?
- Are existing decision-making structures modified and new structures added as necessary?
- Is decision-making open and inclusive?
- Are data collected and used to inform important decisions?
- Is training provided to members of governance groups?
- Is enough time provided for those groups involved in making decisions?
- Are changes in governance viewed as means to ends, not as ends in themselves?
- Is evidence collected to determine the effectiveness of decisions that are made?

Teacher/Principal Leadership

- Are a range of opportunities for teacher leadership being provided?
- Is training in leadership and group process provided when teachers need it?
- Do teacher leaders retain connections to the classroom?
- Does the culture of the school support teachers emerging as leaders and taking leadership roles?
- Is there evidence over time of continuous growth in the ability of teachers to lead?
- Do teachers have the opportunity to develop a broader perspective on their classroom and school via readings, visitations, conferences, discussions, and so forth?
- Are leadership opportunities offered to a wide range of teachers?
- Are teachers provided access to high-quality professional-development activities?
- To what degree are the principles of facilitative leadership practiced in the building?

- Are new leadership roles and structures being created?

Personnel

- Are people other than certified teachers becoming involved in teaching or in supporting the instructional process?
- Are procedures in place to accommodate learning experiences in the community, via technology, and in settings other than the classroom under the direct guidance of a certified teacher?
- Is there an emphasis on excellence in the teaching staff, with no acceptance of mediocrity or tolerance of incompetence?
- Do hiring procedures ensure those selected support the school's vision and have the requisite skills to help the school move toward the goals of the vision?
- Are there specific procedures to provide close supervision and additional support to beginning teachers?
- Do the teachers want to be where they are? Are they excited about teaching, and do they truly care about young people?
- Are there ways for teachers to move among schools in order to match teachers' teaching styles with program philosophies, and is such movement encouraged?
- Are the current distribution and allocation of staff members within the school consistent with the school vision and mission?

Contractual Relationships

- Are efforts being made to include the professional association as a partner in change?
- Are alternative forms of bargaining being explored at the district level?
- Is there agreement to leave much of the restructuring program out of the negotiated agreement, subject to specified guidelines?
- Are there pilot programs in specific schools to allow faculty to waive elements of the contract if teachers agree to do so?
- Are there good-faith efforts to redefine the role of the professional association in a positive way?

These questions form the basis for assessing the current state of functioning of the school, its values, goals, and perhaps some shortcomings, or at least directions where change is desired. Such information can serve as the basis for a vision-building process. While I do not provide detailed information on how to conduct vision-building activities in a school, I offer the following analysis of the role of vision-building and some elements that enhance the probability of success when developing a vision in a school.

VISION-BUILDING: A POTENTIALLY POWERFUL COMPONENT OF RESTRUCTURING*

In many respects restructuring is not primarily the process of establishing new programs, as noted earlier, but of developing a new picture in the minds of many of what schooling should look like and what educators should be attempting to achieve. Such a picture generally encompasses a combination of values, beliefs, assumptions, and practices that, taken as a whole, constitute a vision of education. The term *vision* appeared with increasing frequency in the literature on leadership and restructuring in the 1980s (Bennis and Nanus 1985, Burns 1978, Kanter 1983).

There seems to be the assumption—mistaken, I believe—that everyone knows what vision is. Before a sense of vision can guide and motivate educators, school personnel must have a better understanding of what it is, how it can be developed, and what can be accomplished by its use.

Vision is not a term that is defined readily or operationalized easily. In some respects, its definition seems analogous to that of art: People may not be able to articulate what makes something art, but they recognize it when they see it. In some cases this ambiguity has led to abuse of the term and the development of a certain amount of cynicism surrounding it in some schools. At the same time, writers on the topic and educators in schools where the concept is having a positive impact on practice respond that they seem to understand more or less intuitively what a vision is.

For the purposes of this discussion, *vision* is defined as *an agreement, explicitly stated in some form, shared by a significant number of participants in an organizational unit, on a mixture of values, beliefs, purposes, and goals that serves to provide a clear reference point for members of the organizational unit to use when making decisions about their behavior in the organizational context. This vision must be clear enough to enable participants to make choices that help move the*

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* This section is excerpted and adapted from: Conley, David. *Lessons from Laboratories in School Restructuring and Site-Based Decision-Making: Oregon's 2020 Schools Take Control of Their Own Reform.* OSSC Bulletin Series. Eugene: Oregon School Study Council, March 1991.

organization toward achievement of the general values, beliefs, purposes, or goals.

Stated differently, vision seems to provide an internal compass for people in complex organizations that helps them understand more clearly how their actions relate to, or contribute to, broader organizational goals. At its best, vision and mission provide, or restore, a sense of purpose and meaning to workers for whom such a sense has been lost or never existed.

This sense of meaning can be critically important, particularly in large bureaucratic organizations, where workers come to lose sight of the purpose of their labor or contribution to larger goals and purposes. Bolman and Deal (1991) present the following assumptions regarding the search for meaning by members of organizations:

> 1. What is most important about any event is *not* what happened, but *what it means.*
> 2. Events and meanings are loosely coupled: the same events can have very different meanings for different people because of differences in the schema that they use to interpret their experience.
> 3. Many of the most significant events and processes in organizations are *ambiguous* or *uncertain*—it is often difficult or impossible to know what happened, why it happened, or what will happen next.
> 4. The greater the ambiguity and uncertainty, the harder it is to use rational approaches to analysis, problem solving, and decision-making.
> 5. Faced with uncertainty and ambiguity, human beings create *symbols* to resolve confusion, increase predictability, and provide direction. (Events themselves may remain illogical, random, fluid, and meaningless, but human symbols make them seem otherwise.)
> 6. Many organizational events and processes are important more for what they express than for what they produce: they are secular myths, rituals, ceremonies, and sagas that help people find meaning and order in their experience. (p. 244, emphasis in original)

An organizational vision, and the process of developing and renewing it, helps people to reduce uncertainty, create common understanding, and find meaning in their day-to-day actions. Considered in the light of Bolman and Deal's assumptions, vision can be viewed as a way in which members of an organization attempt to create a broader sense of meaning for their behaviors.

Vision-building in public schools is not easy. It requires time, which is often in short supply. It is frequently greeted with cynicism, since it has the appearance of being the latest educational fad. It assumes that the people participating in the vision-building process share enough common beliefs, values, and agreement regarding the goals of schooling to be able to arrive at some sort of understanding or expression of commonality. To be done correctly, it requires a great deal of preparation and work; considerable information about the school and trends in education and society generally must be collected and analyzed. And vision-building can be very threatening, particularly if the vision that develops ends up favoring certain elements of the educational program over others.

SOME PREREQUISITES FOR SUCCESSFUL VISION-BUILDING

Following are some general observations regarding prerequisites to successful vision-building (Conley, Dunlap, and Goldman 1992). They are based in part on interview data (D. Conley, March 1991) and in part on literature in the area of vision and related topics. These observations should be considered tentative and exploratory.

1. A previous history of and success with systematic school-improvement efforts. Such a history seems to provide important conditions that encourage the "leap of faith" involved with undertaking vision-building. Staff have a stronger sense of personal efficacy, which leads them to believe they can influence the conditions of work and the organizational culture of their school site. Previous experience with school improvement also allows for the creation of leadership, particularly teacher leadership, and for more opportunities for teachers to develop the interpersonal skills necessary to conduct or participate in processes that require multiple human interactions, each with the potential for conflict.

The model or type of school improvement undertaken previously does not seem to be of critical importance. In fact, some sites have been involved in a variety of strategies over the past ten years. Most previous attempts at systematic improvement were regarded to have been at least partially successful.

2. A willingness to examine data in various forms and employ them in the decision-making process. Data can take many forms, including: (a) information about current practices at the school and the efficacy of those practices, such as attendance data; test results; parent, teacher, or student surveys; or observation of classroom practices; (b) journals and periodicals offering a perspective on current thinking and innovative practices in education, and on societal trends; and (c) visits to other school sites, or work sites, to learn firsthand about new techniques.

All this information feeds into the vision-building process to help overcome the tendency of educators to make decisions based on anecdotal or impressionistic information from self-proclaimed faculty "experts" or from the person who is most emotional about an issue. In addition to gathering this information, faculties have been willing to commit to employing it as a frame of reference when determining vision and mission or when setting goals.

3. Principals who were willing to share power and decision-making to some degree. An important distinction needs to be made here between schools with "heroic" leaders, who develop the vision personally and "sell" it through a variety of strategies, and those who simply create the conditions whereby others may develop the vision. It appears that both of these methods can provide the conditions necessary for a collective vision to be developed and embraced; however, in the case of the "heroic" principal, it still appears to be necessary for the principal to release ownership and allow the vision to become the staff's for it to take hold successfully. This sharing of ownership may involve changes from what the principal envisioned initially, and it may entail the use of a process different from that which the principal viewed as ideal. The willingness of principals to step aside to some degree seems to be mandatory for successful vision-building.

Fullan (1992) notes that "the current emphasis on vision in leadership... can blind leaders in a number of ways." Leaders can become committed to a particular way of doing things or a specific project or strategy in a narrow, self-defeating way that causes teacher resistance. High-powered, charismatic principals are also at risk of seeing their ideas and strategies depart shortly after they do. In both cases, Fullan cautions, "too much store is placed in the leader as solution compared to the leader as *enabler* of solutions.... The crucial question is, 'Whose vision is it?'"

4. A commitment to act upon the results of the vision-building process. Many schools are or recently have been involved in vision-building activities, at least in part as a result of the popularity of strategic planning. In many cases these visions have been developed in a vacuum; no one is certain why they are being created or for what purpose. Often these visions or missions can be seen adorning school hallways, stationery, and business cards, while having little impact on school decisions or operations.

Vision-building processes that are successful already have a clear role in the school's operation. In this case, the vision is an extension of the school's traditions of clear purpose and direction. Having a clearly identified role for the mission before the process begins raises the likelihood that the process will be successful.

5. A central office that is, at least, willing to keep out of the process and, at best, willing to support it actively. In the schools examined and in the literature, the central office is often viewed by participants in vision-building as a hindrance. While this perception clearly reflects the ambiguous power (and personal) relationships that often exist between individual educators at school sites and central administrators, it also suggests that the most important role central offices can play is to let schools know they can proceed with the process of vision-building without fear of reprisal. In addition, central-office staff can provide: (a) general districtwide vision, mission, and goals that create an arena in which the school may define its own purposes; (b) data not readily available to the sites that can help build the database upon which decisions about vision can be made; and (c) assistance with the process in those instances where central administration is perceived as a source of help and where there are people within central administration who have the technical skills to facilitate such a process.

6. An awareness of the natural tension between top-down and bottom-up planning strategies. Strategic planning in education has gained popularity during the past six years. It has been adapted from the private sector to the educational context primarily by increasing the amount of participation and the openness of the process. However, even in its modified form, it still emphasizes mission-setting and vision-building by a small team at the district level as the first step in the process. Is there an inherent conflict between centrally created visions and missions and those created at individual school sites?

In one study of schools involved in restructuring (Goldman, Dunlap, and Conley 1991), none of the schools was operating in a district with a strategic plan that served as a referent point for decision-making. Therefore, these schools did not have to confront this issue. It is interesting to speculate about what would occur if a strategic-planning process were to be introduced at the district level. How would these schools react to a mission and vision being imposed upon them after they had developed their own?

Perhaps it would make sense in some districts for all schools to begin by making a first pass at developing a vision before such work began at the district level. The results of such a process at the site level might help inform the district-level process and create greater ownership of the vision and mission that developed.

The more common practice has been for the district to develop its mission and vision, then mandate that each school examine its practices in relation to the district direction and develop its own version of the district's document. The relative effectiveness of these two possible strategies for integrating strategic planning and site-level vision-building bears further investigation, since they involve the basic relationship between centralization and decentralization in determining the direction of an organization.

Many schools and districts have attempted vision-building via the strategic-planning process with mixed results. While participants express high satisfaction with the process and confidence that student learning will be positively affected, the evidence of effects is thin (Conley 1992, 1993, Fall 1994, December 1994). For a vision-building process to lead to educational change, it must be linked to a broader framework like the one being described here. Vision as an end in itself does not seem to be a powerful tool for restructuring. However, it can contribute to readiness when linked with other activities that move the school toward action, such as group agreements, key questions, and examination of other programs, as have been described earlier.

This chapter has explored the importance of increasing alignment among staff members and stakeholders to build acceptance of the need for change. Many of the activities suggested here can easily accommodate participation by parents, community members, and even students. Over time the net effect of this broad array of activities is to create an environment that is more hospitable to educational change. The next chapter describes the challenge of implementing new ideas and programs once some level of agreement about the necessity for and general parameters of change exist.

CHAPTER 23

MOVING THE PROCESS FORWARD: MACROLEVEL CHALLENGES

As difficult as it can be to reach any agreement on the need to change and the ground rules for proceeding, the actual process of change is a magnitude of difficulty greater. There are a number of reasons for this, some structural, some cultural, some related to human nature. These factors combine in schools (and most large, complex organizations) to confound the agreements and trust established in the earlier readiness process. No one factor makes change easier, but an awareness of the challenges being faced can help those attempting to restructure to enter the implementation process with their eyes wide open.

This chapter weighs the effect of macrolevel factors on the ability of schools to change. These factors include the ambiguous policy and goal environment within which schools function, the problems schools face regarding finance systems, the bureaucratic nature of schools as organizations, and the power of organizational culture. Finally, I summarize some general observations by Fullan and Miles (1992) and Fullan (1993) on why reform typically fails and how educators can avoid failure.

AMBIGUOUS AND CONFUSING POLICY TOWARD EDUCATION

Much of the problem begins with the general policy environment within which public education exists. Different groups at different levels of government have shaped educational policy toward their goals with little regard to the overall effect of such policy fragmentation. Those who develop policy have often not given much thought to how it is to be implemented. Smith and O'Day (1991) argue that this tug-and-pull of policy development and implementation among federal and state governments, local school districts, special-interest groups, and others

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creates a system where it is almost impossible to sustain systemic-improvement efforts:

> A fundamental barrier to developing and sustaining successful schools in the USA is the fragmented, complex, multi-layered educational policy system in which they are embedded (Cohen 1990, Fuhrman 1990).
>
> This system consists of overlapping and often conflicting formal and informal policy components on the one hand and, on the other, of a myriad of contending pressures for immediate results that serve only to further disperse and drain the already fragmented energies of dedicated and well meaning school personnel. On the formal policy side, school personnel are daily confronted with mandates, guidelines, incentives, sanctions, and programs constructed by a half-dozen different federal congressional committees, at least that many federal departments and independent agencies, and the federal courts; state school administrators, legislative committees, boards, commissions and courts; regional or county offices in most states; district level administrators and school boards in 14,000 school districts...; and local school building administrators, teachers and committees of interested parents. Every level and many different agencies within levels attempt to influence the curriculum and curricular materials, teacher in-service and pre-service professional development, assessment, student policies such as attendance and promotion, and the special services that schools provide to handicapped, limited English-proficient and low-achieving students. (p. 237)

Within this policy environment, change becomes a very uncertain process. As was noted earlier, two results of this disjointed policy environment are a lack of goal congruence and, at a more fundamental level, a lack of control over the goals of the organization. This inability to focus effort, or to provide members of the organization with a clear picture of its purpose and goals, makes systematic change even more difficult. Joyce, Hersh, and McKibbin (1983) present the spectrum of possible functions or missions for public schools, all of which have legitimacy at some level and most of which have their own constituencies. These authors suggest three domains—personal, social, and academic—each of which has various goals or alternative functions:

The Personal Domain:

- Develop the self.
- Develop productive thinking capacities, including creativity, flexibility, ability to produce alternatives.
- Develop a personal meaning.
- Develop problem-solving ability and flexibility.
- Develop aesthetic capacity.
- Develop motivation to achieve.

The Social Domain:

- Enculturation—socializing students to their culture and transmitting their cultural heritage.
- Develop internationalism and social activism.
- Develop cooperative problem-solving—democratic-scientific approach, political and social activism.
- Promote nationalism.
- Improve human relations—increasing affiliation and decreasing alienation.

The Academic Domain:

- Emphasize general symbol proficiency—reading, writing, arithmetic, technical methods.
- Emphasize information from selected disciplines—history, geography, literature, etc.
- Emphasize major concepts from the disciplines.
  a. Treat broad, related fields together (social studies, language arts, science).
  b. Treat a few disciplines separately (i.e., economics, physics, history, music).
- Emphasize modes of inquiry.
  a. Treat theory building and scientific method.
  b. Treat knowledge creation within a few, selected disciplines.
- Emphasize broad, philosophical schools or problems—aesthetics, humanitarian issues, ethics. (Excerpted from pp. 252-56)

Public schools have faced the problem of comprehensiveness throughout most of this century. In a democratic society that rejects the social class system, public education is seen as a means to offer choice and opportunity to all citizens. Goal confusion is quite understandable, even desirable, if society supports the ability of schools to address multiple goals simultaneously. This ability requires resources, however. As I discuss in the next section, changes in school financing over the past two decades have not necessarily made it any easier for schools to pursue multiple goals simultaneously.

EQUITY OF FINANCE SYSTEMS

By the 1970s the systems by which schools were financed had grown to be blatantly inequitable. Reliance on local property taxes had resulted in communities with high assessments being able to tax themselves at a low rate, while their neighbors in poorer districts had to pay much more for their children to receive what in many cases was not even a comparable education. Such an arrangement had been acceptable so long as the level of common education that all citizens were expected to master was low and so long as economic opportunities were available even for those with little formal education. Equality of achievement was not a fundamental goal of the system. As it becomes socially important for essentially all students to complete much more schooling and be capable of performing at relatively high levels upon completion, the inequity of financing becomes a vital issue.

At the same time, the federal and state governments began to mandate more programs local school districts had to offer, without necessarily providing the funding necessary for their implementation. This gradual impingement on local control led local districts to demand that states fund programs they mandated. Such pressures contributed to a climate in which finance reform was more likely to take place.

Nearly every state has undergone change in school-finance systems since the 1970s (Odden and Wohlstetter 1992). Rarely has the avowed goal of this reform been to improve student learning (though lip service has frequently been paid to this goal). Equity in the context of discussions of finance in the 1970s and early 1980s meant equity of taxation, not of student achievement. Education had relied heavily on property taxes, until the tax revolt that began in California in the late seventies caused state governments to shoulder more responsibility for funding education. In fact, finance reform often meant "leveling down," where higher spending districts were held in place or had their revenue reduced so that lower spending districts might receive an increase in funding. This form of equity often had the effect of decreasing resources for districts that had historically been among the more progressive within a state or region.

The development of educational-finance policy is another example of the "fragmented, complex, multi-layered educational policy system" described by Smith and O'Day (1991). Odden and Wohlstetter (1992) note the increasing complexity of policy development in school finance, as evidenced by the number of different initiators and their varying goals. In the 1980s these forces were external to schools and occurred at the national, rather than state, level. They had implications for state financing of education and for school reform. Odden and Wohlstetter identify two events—the release of the report *A Nation at Risk* (David P. Gardner and others 1983) and the realization by business leaders that the nature of the work force and the definition of a well-prepared worker were changing—as catalysts for changes in funding during the eighties. Changes in school finance in the 1980s were for the purpose of improving American economic competitiveness by improving schools.

> A new political quid pro quo emerged for increasing education funding. No longer would state political leaders provide money on the stump through equalization formulas and hope that local educators would use it to improve the education system. States created a variety of new fiscal incentives (Richards & Shujaa, 1989) to reward schools and districts for meeting education improvement objectives. (Odden and Wohlstetter 1992, p. 372)

In other words, increased funding began to be linked to increased performance. States launched testing programs to determine if improvement was, in fact, occurring, which led to intensified debate regarding whether the tests really were measuring what society wanted students to know and do.

It should be noted that more resources do not automatically equal more change in schools. The evidence from recently enacted school-finance-reform laws suggests that historically low-spending districts that receive increased funding do not necessarily initiate significant change or restructuring as a result of receiving additional funds. Other issues are addressed first. Money alone does not appear to change the basic culture or orientation toward change of a school district. If, as Odden and Wohlstetter suggest, "the economy will continue as a triggering event keeping education as a top policy issue" since "the link between education and the country's economic productivity...has become conventional wisdom for the 1990s," educators can expect to be under increasing pressure to deliver major changes and improvements in education as a result of new funding strategies. The current situation in many states indicates that such outcomes will be problematic, because of both the tightening of funding for many innovative districts and the difficulty of transforming the culture of historically low-spending districts through increased funding alone.

Further confounding the problems with funding is the bleak outlook for substantial increases in the funds available to government during the late 1990s. Orland and Cohen (1995) analyzed trends in state spending on education from 1970 to 1994 and concluded:

> The growth in per-pupil spending is unlikely to continue at its 1970-to-1992 rates. The principal factors associated with strong spending increases since 1970 (i.e., economic growth and declining school enrollments) are changing. Economic projections anticipate generally lower levels of economic growth in the years ahead. Demographic forecasts predict increasing school enrollment in most states. In addition, greater demands on state and local budgets can be expected from other government service sectors

> as a consequence of reduced federal financing. Such conditions will make it exceedingly difficult for most states to continue making per-pupil education increases comparable to those of the past two decades. Recent spending data from 1990 to 1994 reveal that a marked slowdown has probably already begun. (p. 3)

Real income has not grown significantly for the past fifteen years for the vast majority of wage earners and has decreased for those with less than a college education. Managerial jobs are being trimmed, duplicating the decline in blue-collar jobs that occurred in the early eighties. Demands for increased efficiency in government continue.

School-finance litigation has resulted in changes in over thirty-five states. In general, these changes have resulted in more centralization of education funding at the state level and less reliance on local property taxes. The policy implications of this revolution are just now beginning to manifest themselves. This change is already beginning to result in state legislatures that are more willing to undertake large-scale education-reform efforts and to insist on consistent performance standards for students in return for sustaining current funding levels, let alone increasing funding. Although legislatures may continue to make gestures to the ideal of local control of education, the trend is firmly in the direction of state mandates, even in states with strong traditions of local control. This trend will only accelerate as more education dollars come from state general funds and less from locally determined and generated sources.

Educational managers in the nineties will likely have to learn to effect change without large amounts of additional resources available to aid the process. They will also have to learn to be much more aware of the expectations the state has for them, expectations they were more able to ignore when the authority and funding for education were locally controlled. Principals in particular could have dual masters: their local board of education and superintendent on the one hand, and the state legislature and department of education on the other. If these two masters are issuing contradictory edicts and pursuing conflicting goals, principals will be caught in a squeeze.

There is evidence, particularly from nongovernmental organizations, that the crises triggered by fiscal shortfalls often precipitate large-scale change in bureaucratic organizations. Fiscal changes and crises can come to offer both threat and opportunity. Educational leaders will be challenged to manage looming fiscal changes and crises in ways that lead to an improvement in the functions of their organizations, not merely a reduction in size or a retention of the status quo. This is both a tremendous opportunity and a formidable challenge.

BUREAUCRATIC NATURE OF EDUCATIONAL ORGANIZATIONS

Schools in this country began as extensions of local communities, with strong ties to the values and organizations of the communities within which they existed. Since the turn of the century, schools have become increasingly bureaucratic in nature and separated from the communities that surround them. While bureaucratic structures serve to protect schools from arbitrary and capricious interventions in their functioning, they also lessen the ability of schools to adapt and change. Bureaucracies limit communication, participation in decision-making, and comprehension by members of the organization's goals and their contribution to the achievement of those goals. Clark and Meloy (1990) describe the influence bureaucratic features have had on the organization of schools and on teachers' professional lives:

> Two... features of bureaucracy, specialization and specification, have had particularly important effects on the organization of schools. The former characteristic is designed to provide for technical expertise in the system where such expertise is required. The latter clarifies the assignment and scope of responsibility of individual employees. The technical expertise of the teacher has been defined narrowly, i.e., as a subject and/or grade specialization *in the classroom*. Broader instructional expertise, curriculum development and planning, has typically been vested in staff and line administrators from curriculum specialists to the principal. The consequences for teachers have been several. Teachers have become isolated from one another and from the principal during the school day. The autonomy of the teacher in the classroom has resulted in the restriction of the teacher's role and responsibility to the teaching-learning act. (p. 10, emphasis in original)

Decisions in bureaucracies are made based on hierarchies of authority. Each level defers to the level above it for guidance and approval. Workers continue to do what they have been authorized to do within their area of specialization and authority. Change is not initiated without permission. The hierarchical nature of the organization tends to drive out initiative, creativity, ownership, or a systems perspective. Schools come to be bureaucracies with a hierarchy that culminates with the principal:

> Bureaucracy, as an organizational form, carries with it a set of minimal unavoidable elements. Bureaucracy makes no sense without a hierarchy. The hierarchy serves two functions of the bureaucracy: official authority and specialization. The principal of a school assumes a set of specialized functions of an administrative nature in the building while simultaneously representing the point in the scalar hierarchy where the "buck stops" within the building unit. (Clark and Meloy 1990, p. 9)

Within this context people wait to be told what to do. They come to view their interests as the interests of the organization (or not to think in terms of the organization's interests at all). They have little experience participating in discussions or interactions across work groups. They are not able to design work tasks so that their efforts contribute harmoniously to those of all others involved in the same or similar process.

The bureaucratic structure of schools may be one of the most formidable barriers to be encountered when attempting to bring about system-level change in schools. In fact, it may be nearly impossible to get people to think about any other structure for organizing schooling:

> There is an overarching assumption that bureaucracy is an inevitable structural form for work organizations large or complex enough so that daily contact among all employees is impossible. Almost all school systems and the majority of schools meet this criterion. (Clark and Meloy 1990, p. 9)

Further complicating this conception of the nature of schools as organizations is the ambiguous role of teachers as both professionals and bureaucrats. Linda Darling-Hammond (1990) describes the principles of professionalism and suggests why the bureaucratic nature of schooling makes it difficult for such principles to take hold:

> Professionalism depends not on compensation or status, but on the affirmation of three principles in the conduct and governance of an occupation:
>
> 1. Knowledge is the basis for permission to practice and for decisions that are made with respect to the unique needs of clients;
> 2. The practitioner pledges his first concern to the welfare of the clients;
> 3. The profession assumes collective responsibility for the definition, transmittal and enforcement of professional standards of practice and ethics.
>
> These principles outline a view of practice that is *client-oriented* and *knowledge-based*. This view also suggests criteria and methods for accountability that are based on the competence of practitioners and their effectiveness. Currently the practice of teaching in public schools is not organized to support these principles or modes of accountability. Instead, the bureaucratic organization of schooling and teaching requires practice that is procedure-oriented and rule-based. It enforces accountability based on the job scripts of practitioners and their compliance with task specifications. The individual needs of students are difficult to accommodate in this system. The growth of knowledge in the occupation is difficult to support and sustain. (p. 25, emphasis in original)

In such an environment, it might be added, it is also difficult for the system to change. For education to have much of a chance of evolving rapidly, issues of bureaucratic organization, hierarchical relationships, institutional inflexibility, and teacher isolation will have to be addressed. Given people's difficulty in conceiving of organizational structures other than bureaucracies, addressing these issues will be a challenge.

UNDERSTANDING CULTURE AND ORGANIZATIONAL FRAMES OF REFERENCE

One of the factors that must be considered when attempting to bring about fundamental change in an institution is its culture. The process of school restructuring cannot be thought of simply in terms of changes in organizational structure, or of a proliferation of isolated projects and programs. Ultimately, it must address issues of the culture of the school. Deal (1987) explains why culture is so important as a means to understand schools as stable environments:

> Culture as a construct helps explain why classrooms and schools exhibit common and stable patterns across variable conditions. Internally, culture gives meaning to instructional activity and provides a symbolic bridge between action and results. It fuses individual identity with collective destiny. Externally, culture provides the symbolic facade that evokes faith and confidence among outsiders with a stake in education (Meyer and Rowan 1983). (Deal 1987, p. 6)

Understanding the importance and power of culture can help educational leaders attend to the needs that participants in the organization are sure to have in times of rapid change, which evokes powerful psychological responses on the part of many people:

> Looking at the problem of change through a cultural lens, we see an entirely different picture. Culture is a social invention created to give meaning to human endeavor. It provides stability, certainty, and predictability. People fear ambiguity and want assurance that they are in control of their surroundings. Culture imbues life with meaning and through symbols creates a sense of efficacy and control. Change creates existential havoc because it introduces disequilibrium, uncertainty, and makes day-to-day life chaotic and unpredictable. People understandably feel threatened and out of control when their existential pillars become shaky or are taken away.
>
> On an even more basic level, change involves existential loss (Marris 1974). People become emotionally attached to symbols and rituals, much as they do to lovers, spouses, children, and pets (Deal, 1985b). When attachments to people or objects are broken through death or departure, people experience a deep sense of loss and grief. Change creates a similar reaction....
>
> People develop attachments to values, heroes, rituals, ceremonies, stories, gossips, storytellers, priests, and other cultural players. When

> change alters or breaks the attachment, meaning is questioned. Often, the change deeply affects those inside the culture as well as those outside.... The existential explanation identifies the basic problems of change in educational organizations as cultural transitions. (Deal 1987, pp. 7-8)

Deal suggests that leaders must be adept at confronting the dilemmas that face organizations, not merely at solving problems. Dilemmas by their nature are insoluble. Leaders, rather than moving from problem to problem, attempt to create meaning by addressing recurring frustrations and seemingly unresolvable contradictions in ways that allow the organization to move itself forward and not remain trapped applying the same solutions over and over to problems that do not lend themselves to solution within the current cultural context of the organization:

> Leaders reframe impossible dilemmas into novel opportunities. Leaders in organizations across all sectors are confronted with many of the same issues that educators now face: (1) How do we encourage meaning and commitment; (2) how do we deal with loss and change; and (3) how can we shape symbols that convey the essence of the enterprise to insiders and outsiders? Educational leaders must create artful ways to reweave organizational tapestries from old traditions, current realities, and future visions. This work cannot be done by clinging to old ways, emulating principles from effective schools and excellent companies, or divining futuristic images from what we imagine the next decades will be like. Rather, it takes a collective look backward, inward, and ahead—in education on the part of administrators, teachers, parents, students, and other members of a school community. It is a process of transformation akin to the one that produces a butterfly from a caterpillar—a cocoon of human experience in which past, present, and future are fused together in an organic process....
>
> ... Old practices and other losses need to be buried and commemorated. Meaningless practices and symbols need to be analyzed and revitalized. Emerging visions, dreams, and hopes need to be articulated and celebrated. These are the core tasks that will occupy educational leaders for several years to come. (Deal 1987, pp. 12, 14)

School leaders need to be capable of reading school culture if they hope to manage fundamental change successfully. Good ideas are rarely implemented simply because they make sense. Rather, schools tend to accept ideas or programs that are consistent with the existing structure, assumptions, and culture of the school, so that a school that "believes in" tracking is much more open to a program that makes tracking more effective than one that calls for the abandonment of tracking. The restructuring process calls for the critical examination of fundamental assumptions, practices, and relationships. It implies a movement from bureaucracy to community, from isolation to collaboration. Such changes are cultural changes, not just programmatic changes.

Managing culture is an imprecise process that is not easily prescribed. This process is part of the art of leadership, knowing when to do what in ways that have an impact on members of the organization, as Deal and Peterson (1990) explain:

> Reading culture takes several forms: watching, sensing, listening, interpreting, using all of one's senses, and even employing intuition when necessary. First, the leader must listen to the echoes of school history....
>
> ... A principal must also listen to the key voices of the present. These people [in the informal leadership network of the school] may be thought of as cultural "players" in various dramas at the school.... [The cast of characters include:]
>
> - Priests and priestesses—long-time residents who "minister" to the needs of the school. They take confession, preside over rituals and ceremonies, and link the school to the ways of the past;
> - Storytellers—recreate the past and personify contemporary exploits through lore and informal history;
> - Gossips—keep everyone current on contemporary matters of importance, as well as trivia of no special merit. They form the informal grapevine that carries information far ahead of formal channels of communication; and
> - Spies, counterspies, and moles—carry on subterranean negotiations which keep informal checks and balances among various power centers in the school. Through such covert operations, much of the work of the school is transacted....
>
> ... Most important, the leader must listen for the deeper dreams and hopes the school community holds for the future....
>
> This represents emerging energy the principal can tap and a deep belief system to which he or she can appeal when articulating what the school might become.
>
> A principal can get an initial reading of a school by asking these key questions about the founding, traditions, building, current realities, and future dreams of the school:
>
> - How long has the school existed?
> - Why was it built, and who were the first inhabitants?
> - Who had a major influence on the school's direction?
> - What critical incidents occurred in the past, and how were they resolved, if at all?
> - What were the preceding principals, teachers, and students like?
> - What does the school's architecture convey? How is space arranged and used?
> - What subcultures exist inside and outside the school?

- Who are the recognized (and unrecognized) heroes and villains of the school?
- What do people say (and think) when asked what the school stands for? What would they miss if they left?
- What events are assigned special importance?
- How is conflict typically defined? How is it handled?
- What are the key ceremonies and stories of the school?
- What do people wish for? Are there patterns to their individual dreams? (Deal and Peterson 1990, pp. 16-19)

Culture cannot be ignored. No program of change starts with a clean slate. The history of the institution must be recognized and dealt with. The current communication patterns and the implicit, unquestioned assumptions and value systems must be understood and acknowledged. The hopes and aspirations, dreams and fears for the future must be articulated and addressed. Understanding and responding to the school culture seems to be a critical dimension that has to be addressed in the development of a strategy for school restructuring and in the implementation of such a program.

Managing the change process within a cultural context is influenced by the frame of reference the leader employs when analyzing the organization. Leaders often have unconscious tendencies to apply one frame of reference through which they tend to explain all of what occurs in the organization, and within which all of their solutions operate. Bolman and Deal (1991) have suggested four frames of reference commonly employed by managers and leaders as they attempt to manage organizations and bring about changes in them:

> The structural frame... emphasizes the importance of formal roles and relationships. Structures—commonly depicted by means of organization charts—are created to fit an organization's environment and technology.... Problems arise when the structure does not fit the situation. At that point, some form of reorganization is needed to remedy the mismatch.
>
> The human resources frame... starts with the fundamental premise that organizations are inhabited by individuals who have needs, feelings, and prejudices.... From a human resources perspective, the key to effectiveness is to tailor organizations to people—to find an organizational form that enables people to get the job done while feeling good about what they are doing.
>
> The political frame... views organizations as arenas in which different interest groups compete for power and scarce resources.... Problems arise because power is concentrated in the wrong places or because it is so broadly dispersed that nothing gets done. Solutions are developed through political skill and acumen....
>
> The symbolic frame... abandons the assumptions of rationality that appear in the other frames. It treats organizations as tribes, theater, or carnivals. In

> this view, organizations are cultures that are propelled more by rituals, ceremonies, stories, heroes, and myths than by rules, policies, and managerial authority.... Improvements in rebuilding the expressive or spiritual side of organizations come through the use of symbol, myth, and magic.
>
> Each of these frames has its own vision or image of reality. Only when managers, consultants, and policymakers can look through all four are they likely to appreciate the depth and complexity of organizational life. (pp. 15-16)

Restructuring schools, then, is not simply the process of bringing about change in one of these frames while ignoring the others. Structural changes alone, such as forming a new committee or rewriting the role descriptions of department chairs, are not likely to be successful. Neither will activities that simply improve the quality of teacher worklife with no linkage to job performance; in other words, happier teachers are not automatically better teachers. Nor will more adept manipulation of the political system present in the school lead directly to restructuring. Political maneuvering can help or hinder progress but needs linkages to other frames, as well. Careful management of symbol systems, rituals, and myths can also contribute to successful change but does not guarantee it in isolation. However, if educators understand that change must occur to some degree in each of these frames, restructuring is more likely to occur and to transform schooling. A leader's job is to make conscious decisions that have an impact on the culture of the school in a way that makes that culture more amenable to change and more functional in its delivery of services to students.

FAILURE VS. SUCCESS OF REFORMS

Fullan and Miles (1992) and Fullan (1993) describe some of the reasons educational reforms typically fail. School personnel have a better chance of engaging in continuous improvement if they understand seven basic reasons why reform fails and consider seven propositions that could lead to success. The following paragraphs summarize Fullan and Miles's and Fullan's ideas in two parts, "Why Reform Fails" and "Propositions for Success." Headings and text in quotes are taken verbatim; all other text has been paraphrased.

WHY REFORM FAILS

1. Faulty maps of change. All participants in reform have personal maps that guide their understanding of how change should (or will) unfold. These maps can be accurate or inaccurate.

2. Complex problems. Solutions are much more complex than participants often imagine. This requires a different map than for solving simple problems.

3. Symbols over substance. Reform can be as much a political as an educational process. People get involved in reform for a wide range of motives. The symbols we pick define how reform is interpreted. At the same time, change can easily become only symbolic. It is easier to have symbolic change than substantive change.

4. Impatient and superficial solutions. Many solutions are pseudosolutions. Particularly susceptible are those that focus on structural changes as the answer. They can be launched administratively with little involvement or support by teachers.

5. Misunderstanding resistance. Labeling an action or attitude as "resistance" can be unproductive since it diverts attention from real problems such as lack of technical skills, insufficient resources, or personal needs or developmental stages of individuals. Resistance can, in fact, be an authentic response that indicates concern about the well-being of children.

6. Attrition of pockets of success. Successful reforms have tended to require enormous effort and energy on the part of an individual or small group of individuals. It is very difficult to sustain this effort over time. Schools cannot stay innovative without continuing outside support that validates their efforts and allows them to be legitimized and institutionalized.

7. Misuse of knowledge about the change process. The change process cannot be reduced to a series of slogans or aphorisms. Reform is systemic and must be based on sound knowledge of change from a systems perspective.

PROPOSITIONS FOR SUCCESS

1. Change is learning—loaded with uncertainty. Those who have the power to manipulate change must not disregard the personal change that is required of all who participate in a major change. This lack of sensitivity to the personal growth that others must undergo overlooks or denies the process that the change agent has already gone through to accommodate his or her behavior and world view to the innovation or change. "In short, anxiety, difficulties, and uncertainty are intrinsic to all successful change."

2. Change is a journey, not a blueprint. Rational-planning models simply do not work in complex organizations such as schools. While such models can provide useful frameworks for organizing change efforts, implementation involves frequent departure from the constraints of a model, adaptation to local conditions and unexpected events, and a willingness to allow participants to create personal meaning out of the change. Strategy must be a flexible tool and not become an end in itself.

3. Problems are our friends. Effective responses to complex changes in organizations cannot be developed unless there is an acceptance of problems as natural, expected phenomena. There must be a willingness to confront and resolve problems, rather than to deny, ignore, or repress them. Schools that cope with problems successfully make use of coping styles that range from doing little to redesigning the system, retraining staff, or making individuals more capable of dealing with the problems they face. In fact, it appears that schools should assertively pursue problems if they wish to improve continuously. This is another way of saying that conflict is essential to any successful change effort.

4. Change is resource-hungry. "Every analysis of the problems of change efforts we have seen in the last decade of research and practice has concluded that time is the salient issue." Time requires additional resources in most cases. In addition to time, assistance in the form of training, coaching, consulting, coordination, and capacity-building is necessary. Such support should be present over a number of years. Schools need to become effective at "resourcing"—scanning the environment and identifying and acquiring resources by networking, negotiating, reworking, or simply grabbing them, when appropriate. It means abandoning notions of self-sufficiency or closed-systems thinking.

5. Change requires the power to manage it. Change must be managed. There appear to be several essential ingredients. Cross-role groups (teachers, department heads, administrators, parents, students) may be the most effective means of managing change. These groups need legitimacy, an explicit contract that is widely understood regarding the decisions it can make and the money it can spend. Even if such groups work well, they will still require cooperation, trust, and the ability to live with ambiguity and conflict. Power-sharing is complex and sensitive. It has an impact on the egos of all involved and tends to bring out insecurities in those "giving up" authority. When power-sharing begins at the school, it can rarely succeed if the district is not closely engaged in the process and does not accept the basic premises of power-sharing.

6. Change is systemic. Change has often meant a "project mentality," a steady stream of episodic innovations. These programs have tended to come and go without leaving much of a mark on schools. Fundamental change must involve all the main components of the system simultaneously and must focus on culture along with structure, policy, and regulations. Along with restructuring, schools may need to engage in "reculturing." They need to avoid ad hoc innovations and focus on a thoughtful combination of coordinated, integrated short-, mid-, and long-term strategies.

7. All large-scale change is implemented locally. The six previous points all suggest the obvious: change occurs only when teachers, principals, students, and others at the school site change their behavior. At the same time, the role of agencies that coordinate, assist, or direct groups of schools should not be overlooked. There is, ultimately, a symbiotic relationship between and among these different agencies when it comes to implementing educational change.

8. You can't mandate what matters: The more complex the change, the less you can force it. While mandates are important in helping educators to move from the status quo, they are no guarantee change will occur. Only things that can be monitored through close surveillance and things that do not require thinking or skill to implement can be mandated effectively. The acid test for innovations is that individuals and groups develop skills and deep understandings in relation to new solutions. Mandates have little chance of accomplishing substantive changes. They may alter some things without creating true change. Effective change agents do not ignore mandates, but use them as catalysts to reexamine what they are doing.

9. Vision and strategic planning come later: Premature visions and planning can blind. A vision is necessary for ultimate success, but the concept is widely misunderstood and misapplied. Visions generally come later since in dynamic, complex settings, reflection on experience is required to focus a vision. Furthermore, vision must be shared, which also requires some experiences. In essence, the process allows for the merger of individual and organizational goals and perceptions into a commonly expressed view of a desired state of being—the vision.

10. Individualism and collectivism must have equal power: There are no one-sided solutions to isolation and groupthink. Isolation must be overcome without succumbing to groupthink. Teaching is inherently isolating as practiced in the United States. The problems educators face are so complex and multifaceted that few of these problems can be solved by individuals. However, groups are vulnerable to faddism and tend to suppress intuition and experiential knowledge. The change process must maintain a healthy respect for individual and personal visions in order to foster organizational learning and interchange of ideas. Groups must perceive conflict as healthy, as a tool to increase creativity and ensure all points of view are considered and examined.

11. Neither centralization nor decentralization works: Both top-down and bottom-up strategies are necessary. With centralization comes

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the threat of overcontrol; with decentralization, the threat of chaos. Both the organizational center and the local units, the schools, need each other. Learning to balance influence, power, and authority between the two extremes of top-down and bottom-up forces is the challenge of the change agent.

12. Connections with the wider environment are critical: The best organizations learn externally as well as internally. Organizations must have a sense of social good that is broader than any individual's moral purpose. Teachers must see their work as extending beyond the individual student to the school as a whole. The school as an organization must be actively plugged into its environment. The school must be capable of scanning the environment for opportunities and threats, and of responding rapidly when either is perceived. The environment must be seen as a source of new ideas and of potential obligations and purposes. The school should be connected to the world.

13. Every person is a change agent: Change is too important to leave to the experts. Since no individual can possibly understand the complexity of change in a dynamic system, the responsibility of understanding change cannot be delegated; everyone must be party to comprehending it. Formal leaders cannot work for others, cannot understand and structure change for those less interested in participating in the process. Each individual will have to make significant changes in her or his assumptions, practices, and relationships for change to occur. Adaptations of procedures and routines are not enough. In the end, change has a moral dimension to it; the goal is to do a better job for children, not to improve the profitability of the company, as it is in the private sector. Moral purpose needs an engine, and that engine is the individual. Although skilled change agents can help facilitate greater involvement, in the end each individual must take ownership of the change process.

Other challenges as well face those who would transform schooling. In addition to the systems-level issues and general observations presented up to this point, several issues are more pertinent to change at the school-site level. The following chapter discusses these factors.

CHAPTER 24

MOVING THE PROCESS FORWARD: SCHOOL-SITE OBSTACLES AND LESSONS

There is a tendency when focusing on the need for educational restructuring, and the programs that have been developed to respond to this need, to overlook, if even inadvertently, the tremendous obstacles that an average school must overcome to bring about significant change. In this chapter, I acknowledge the difficulty schools face and catalogue some of the barriers that exist. My purpose is not to discourage those considering or involved in educational restructuring, but to provide a more realistic context within which discussions of change can occur, and to acknowledge the difficulty that those who attempt change will face.

In this chapter, I first consider nine pitfalls encountered at the building level by schools engaged in restructuring. One of the biggest practical obstacles to restructuring at the school site is lack of time for training, reflection, collaborative planning, and implementation and assessment of changes. I cite strategies that have helped some schools find time for restructuring. The primary need for time is to increase professional development, both to give teachers new skills and to help them construct new understanding of their practice of instruction.

The chapter continues with an examination of the critical role of the principal as a leader. The ways in which the principal conceptualizes power and authority have a profound effect on the way change is approached, and on the potential for collective action and ownership of the change process.

The chapter concludes with a brief description of how many of the principles and strategies of restructuring mentioned in part 4 have been put into practice in a number of schools. Several lessons can be learned from their experiences.

NINE PITFALLS OF SCHOOL RESTRUCTURING

The nine pitfalls of restructuring presented here* have been gleaned from a study of schools involved in Oregon's "2020" program (D. Conley, March 1991) combined with observations collected while working with individual 2020 schools on specific projects. Additional information has been provided by reports from school sites nationally that have been involved in restructuring long enough to have identified problem areas. Ethnographic research conducted at eight schools that were charter members of the Coalition of Essential Schools also corroborates many of these pitfalls (Muncey and McQuillan 1993). All these sources suggest the problems schools are encountering as they attempt the complex process of schoolwide restructuring.

Pitfall 1: Lack of a Vision. Many schools approach restructuring in a piecemeal fashion, developing a series of fragmented activities that respond to specific concerns, often those held by a vocal minority of the faculty or based on the latest trends or techniques. Kirst (1991) describes this as "project-itis."

The importance of general consensus about where the school is going and why cannot be stressed enough. The lack of "tight coupling" in schools means it is especially important for teachers to have a shared sense of purpose and direction, since so many of their decisions are made in isolation. A common mission helps align the efforts of everyone in the school toward agreed-upon ends and, as a byproduct, reduces resistance among nonbelievers who find themselves at odds with norms and goals established by their colleagues.

Pitfall 2: The Time Trap. There is never enough time in education. It is easy for a faculty to become sidetracked on one issue and spend most of their time spinning their wheels trying to resolve it. Successful schools use the vision to direct their energies toward activities that will yield changes and improvements. At the same time they acknowledge that it takes time to implement most new practices, usually several years, and that during the implementation phase there may be a time when efficiency and performance actually decrease. This period, dubbed the "implementation dip" by Fullan (1991, Fullan and Miles 1992), can be critical because it is during this time that teachers are most apt to return to former ways when new techniques do not go smoothly. Collegial support combined with awareness by change agents of how difficult it will be for some people to change seem to be key elements in helping people over the "implementation dip."

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* This section is excerpted and adapted from: Conley, David. *Lessons from Laboratories in School Restructuring and Site-Based Decision-Making: Oregon's 2020 Schools Take Control of Their Own Reform.* OSSC Bulletin Series. Eugene: Oregon School Study Council, March 1991.

The time trap also has the tendency to burn out highly motivated people, those who emerge to fill newly created leadership roles. They become emotionally invested in the vision and work exceedingly hard to turn it into a reality. However, they are at risk of being overwhelmed by the combination of regular work responsibilities, new duties, and ongoing family obligations. Care must be exercised to ensure that these people have the time necessary to be successful, and that they are encouraged to take an occasional break. One way to accomplish this is to spread leadership roles around, using newly developing feelings of collegiality to encourage the sharing of responsibilities and tasks.

Pitfall 3: Proceeding Without the Community. It is very easy for educators to overlook the larger community when they undertake change. After all, the professionalization of education over the past fifty years has effectively created barriers against parent and community involvement and has reinforced the idea that educators "know what's best" for kids. We are finding that this must change, that schools cannot proceed without the involvement or at least tacit support of the community.

In some communities it is the parents of those students who are the current "winners" in the educational system who are the most upset about change (West, July 31, 1991). This stands to reason, though it is often overlooked when school-restructuring projects are being developed. Olson (June 13, 1990) quotes one such parent:

> "We're just not about to let our children be experimented upon," said Richard Fruland, parent of a student at Parkway South High School, Manchester, Missouri. "We've got parents who feel the school is exemplary now, that it does an absolutely wonderful job of preparing children and educating them for the future. Whatever changes are needed amount to 'fine tuning'." (p. 8)

Schools undertaking restructuring must be willing to create a sense of urgency for change, both among faculty and community. Once again, the development of a vision helps people to understand why change is occurring and toward what ends. Community members should be involved in the process of vision building, and the vision should be communicated regularly to parents at meetings, through publications, and in face-to-face interchanges.

Pitfall 4: Questions of Meaning. The lack of a common definition of the term *restructuring* has been both a blessing and a curse—a blessing in that it has allowed groups as disparate as teachers' unions and school-boards associations to align themselves in a common cause, at least in principle; a curse in that anyone can do almost anything and claim they are restructuring. And they have. This "anything goes" mentality has tended to devalue the term and has led many teachers to view it with a mixture of caution and cynicism.

Observations in selected 2020 schools in Oregon (Goldman, Dunlap, and Conley 1991) suggest that teachers and administrators in these schools do not spend a great deal of time debating the meaning of the term *restructuring*; these educators do believe, however, that changes must go beyond the superficial. This shared belief expands and is honed as concrete issues of practice are confronted, analyzed, and resolved. A definition of restructuring is built "on the fly" and modified the same way. One measure of the collegiality present in these schools relates to whether they have developed working definitions of important concepts through a series of formal and informal interactions over time.

Pitfall 5: Rose-Colored Glasses Syndrome. Too many schools underestimate the difficulty of bringing about substantial change of the type implied by the term *restructuring*. Particularly when restructuring is viewed as a series of projects, it is common for principals in particular to miscalculate the amount of time and energy necessary to achieve meaningful, sustained change, and the amount of resistance such a process engenders. Perhaps this is why in many schools that describe themselves as "restructured" an outsider sees no substantial change.

Pitfall 6: Governance as an End in Itself. The plethora of literature on site-based management and decentralized decision-making that appeared in the late eighties led many to believe that structural changes in decision-making alone would magically transform education, unleashing its pent-up potential for improvement. This remains an unsupported assumption.

Instead, many faculties are bogged down in the minutiae of participatory decision-making, without knowing why it was instituted or what purpose it is supposed to serve (Strauber, Stanley, and Wagenknecht 1990). In many cases, site-based management was a solution in search of a problem; in the absence of real reasons for teachers to make decisions, or substantial resources for them to control, these new structures focused on maintenance issues and concerns over quality of teacher work life. Changes in governance structure should be undertaken to achieve program goals that cannot be achieved with the current structure.

Pitfall 7: Measuring New Learning with Old Tools. Assessment is a difficult problem at this point in the restructuring movement. There is general agreement that the current measures of student learning are both inadequate and inappropriate for restructured educational environments with new goals and standards, and that development of new methods of assessment must be a high priority. However, it is extremely hard psychologically and practically for educators to abandon traditional testing systems. The result is that as schools attempt to recreate themselves, they continue to measure their effectiveness and success against old benchmarks and with old tools.

Development of alternative assessment technologies is proceeding under the sponsorship of a number of organizations ("Who's Who..." October 23, 1991; Rothman, March 13, 1991). Within the next several years many of these methods will be available. As they arrive online, educators will be challenged to discard the old techniques. Accomplishing this change will require extensive education of teachers and community members. Those schools actively engaged in restructuring must reconcile themselves to surviving during this phase when their programs are under the greatest scrutiny and when they lack the means to demonstrate their successes and learn from their failures.

Pitfall 8: Analysis Paralysis. One of the striking features of the current interest in school restructuring is the number of schools that have established "restructuring committees" or some other group charged with investigating this phenomenon. Many, perhaps most, of these committees are composed of teachers who are excited by the prospects for change. They read articles, discuss and debate, meet with experts and consultants, and visit other schools. They analyze their own school by conducting interviews, taking surveys, and analyzing trends. They develop a very good understanding of the issues and options associated with school restructuring.

The moment of truth arrives when it is time for the faculty to respond to the recommendations or observations of this committee. Will they act, or will they continue to study the process? Very often faculties demand more information or study before agreeing to any changes. The net result is to study the situation to death. The energy and enthusiasm for change dissipate before meaningful change is undertaken. The storm subsides and the school continues along the path of the status quo, with its rationale for *not* changing firmly intact.

Pitfall 9: Isolating the Innovators. The previous pitfall illustrates the difficulty innovators have in traditional school settings. While some are frustrated by being trapped in the "analysis loop," others are controlled by directing their energies to one program or area of the building where they are literally segregated from the rest of the faculty. This solution is seen most often in the form of schools-within-schools or special programs for at-risk students. These arrangements allow the appearance of a changed structure while leaving the core of the academic program untouched.

A strong argument can be made for using these separate programs as a sort of "research and development" environment within schools, where new ideas can be tried, refined, and modeled for the rest of the faculty. This strategy will work only in places where all faculty agree that the lessons learned in these "lab" settings will be applied to the total school program eventually. Getting such an agreement is not always easy. Most teachers are content to allow their colleagues to engage in experiments as long as they themselves are not compelled to change as a result of such experiments. If restructuring is to occur, the work of innovative, "pioneering" teachers must have an effect on the total school program eventually. If this doesn't occur, these pioneers will burn out and the traditional structure will reassert itself.

These observations on the pitfalls of restructuring represent initial, tentative conclusions. They suggest that most of what is being labeled as "restructuring" might better be categorized as "tinkering." Ultimately, restructuring is a high-risk, high-stakes activity that may be alien to public schools, most of which are not prepared to deal with rapid upheaval, reallocation of resources, redistribution of power, and reformulation of values. The early pioneers are learning these lessons.

The difficulties presented in this chapter are daunting. Is it possible to change public schools? In the next chapter, I offer some suggestions for making such a process comprehensible and developing a plan for proceeding in the face of the types of obstacles discussed previously. I examine ways to understand and perhaps influence the critically important culture of the school. Principals can have a significant effect upon the culture and practices of a school, and readiness and vision-building can be important tools for systems awareness and fundamental change in schools.

FINDING THE TIME TO RESTRUCTURE

No discussion of how to move toward restructuring would be complete without reference to the need for additional time for planning, interaction, and discussion to create vision, generation of new learning structures, and development of new instructional skills through staff training. Adequate time must be found to allow teachers to develop vision, modify and implement programs that spring from vision, and create the collegiality that is so vital for restructuring to succeed.

Since restructuring as defined in this book means *fundamental* changes in *assumptions*, *practices*, and *relationships*, it is clear that for most people this means they will need considerable time and support to examine their assumptions, change their practices, and rethink their relationships. Rarely does a program of restructuring allot adequate time to the examination of deeply held, unquestioned beliefs, to the painstaking development of new teaching skills and materials, and to the creation of new networks and interaction patterns necessary to support the kinds of changes in veteran professionals that are desired.

SOME COMMONLY EMPLOYED STRATEGIES TO GET MORE TIME

Some districts and schools have attempted to create additional time through a variety of strategies. Most common is the lengthening of the school day by five to ten minutes on four days to allow for early release of students on one day. This additional twenty to forty minutes can then be used by teachers to plan. As meager an amount of time as this may seem, even an arrangement such as this can help overburdened teachers find time on a regular basis to do the foundation and detail work needed to make restructuring occur.

Other schools start later in the day. One middle school begins its classes at 9:00 to allow teachers time to meet and plan each morning before school.

Block scheduling, discussed earlier, provides teachers with ninety minutes of planning time daily. The four-period day employed with block schedules means that each teacher has preparation time either first thing in the morning, the last period of the day, or on either side of a fifty-minute lunch period. The proximity to these additional periods of unscheduled time has the effect in practice of expanding the functional length of these ninety-minute preparation periods. In addition, during each period of the four-period day, one-fourth of the faculty are available to meet together. Careful and thoughtful assignment of prep periods can allow groups of teachers to meet together regularly throughout the year.

Innovative scheduling has helped some schools to create common prep periods or even to double prep periods for teachers involved in restructuring projects. In schools where schedules are freed from traditional five-day per-week class meetings, it would be possible to combine all of a teacher's prep time into one morning (or afternoon), allowing three to four hours of uninterrupted work time. Granted, it would require the teacher to rethink how this time would be used (if it became a time for marathon grading of papers, little would have been accomplished). Nevertheless, such innovative approaches offer possibilities to reclaim time that already exists in the day.

Schools where team teaching is possible and where project-centered or community-based learning is practiced offer other possibilities. When teachers are truly collaborative, they can reallocate students to free a few members of the faculty to plan. Similarly, when students are on a trip or working on a project in a structured way, parent volunteers can often help while one or more teachers are given time to work on restructuring-related activities.

Summer represents a tremendous, though problematic, opportunity. When people apply the metaphor of "rebuilding the airplane in flight" to describe school-restructuring activities, they overlook the fact that the airplane is actually grounded three consecutive months out of each year. This is time when it is possible to accomplish a great deal. There are deep-seated objections to mandating all teachers to remain on campus in the summer. However, other creative strategies can be employed.

Many states require recertification credit for teachers, and most districts provide salary increases to teachers as they acquire more college credits. During any given summer many faculty members are taking classes, but their individual efforts may or may not be helping the school achieve its restructuring goals. The simple act of organizing a class that specifically addresses a school's restructuring needs can be an inexpensive technique for creating more common planning time during the summer. Attendance at summer conferences by teams of faculty members offers another low-cost, highly effective vehicle for moving restructuring forward.

Summer-school programs might offer another possibility. Such programs can be self-sufficient (or close to it) and can serve as "research and development labs" where new teaching techniques, organizational structures, assessment techniques, or uses of technology can be practiced and studied. Rather than repeating Intro to Math, these programs can be designed to attract a wide range of students, including the talented and gifted. They can be based on the fact that they are interesting and motivating to students, not that they simply offer remedial courses. Many communities have parents, children, and other governmental agencies that would be interested in such an option being available.

Many schools run into a different sort of problem when they attempt to achieve change by releasing teachers from their classes during the school year. So many teachers are out of their classrooms working on projects or visiting other sites that it seems the school is being run by substitutes. This creates anxiety for teachers and occasionally resentment by students and parents. When such a contingency can be anticipated, schools can recruit and train a group of substitutes, bringing them in (with pay) to attend beginning-of-the-year meetings where the school program is explained, having them meet students and become acquainted with the curriculum and school program, and even attending back-to-school nights so that parents become familiar with them. While there is some cost to training and preparing a team of substitutes in this fashion, the results generally outweigh the expense.

EARLY-RELEASE DAYS

Early-release days are common (and sometimes controversial) strategies for gaining more time for restructuring. Boards of education and parents may tend to look on such days with suspicion, assuming they are "working vacations" for staff. Several strategies help reduce this reaction. First, identify these days as far ahead as is practical and publish them frequently. Ideally, dates should be identified before school starts and reminders sent home regularly. Second, publicize and explain to parents and board members the topics and activities that form the focus for each release day. At the same time, demonstrate the linkage of these activities to school and district goals, along with their linkage to improved practice as demonstrated by research.

Third, invite parents and encourage them to attend these sessions. It takes only a few parents saying that such sessions are worthwhile to quiet the criticism of many. Fourth, keep staff on school grounds during school hours. Some teachers may find this suggestion offensive. However, nothing will cause more problems in many communities than to have several teachers seen going out to lunch on an early-release day, regardless of how justifiable it is from the educators' perspective.

Fifth, make provisions for child care and activities for those families who legitimately cannot find someone to watch their children. Normally community volunteers and perhaps one or more substitute teachers who are properly certified can provide coverage in the library, gym, or other areas of the school where structured activities can be organized. With a bit of planning, teachers can build these activities into their curriculums in such a way that kids have meaningful things to do on these days.

Sixth, make arrangements with community agencies to have things to do for those kids who will leave school. Swimming pools, libraries, recreation centers, private child-care providers, and anyone else offering services to children should know when you are having early-release days. Many may plan special activities for students from your school, and some may even provide transportation.

Seventh, build tasks into the curriculum that students can do on release days. Various types of project-centered learning meet this criterion. Community-based internships and various service-learning programs offer chances for students to be occupied productively during early-release days.

Will these arrangements completely eliminate community resistance to early-release days? Probably not, particularly if the school's restructuring program is not well known in the community. However, if these suggestions are followed and if energy is put into informing the community of both the need to change schools and the careful, thoughtful plan the school is following to accomplish this change and improve their children's education, such reactions can be kept to an absolute minimum. At the same time, teachers often feel less guilty about their decreased contact with students if it can be shown that the time faculty spends working on restructuring is not "wasted" by students.

TIME IN ASIAN SCHOOLS

When we compare our practices with those of other nations, our fundamental assumptions often become clearer. One common assumption of American educators is that class size should be kept as small as possible by having as many adults as possible engaged with children at any given moment. Another is that behavior management becomes more difficult as the number of students increases. Still another is that teacher planning is essentially a solitary activity.

Planning, or "prep" time, for all teachers has only been added during the past twenty to thirty years in most schools, and it is generally allocated daily in small blocks, perhaps thirty to forty-five minutes. This fragmented approach to planning all but guarantees that teachers are unable to use this time to do much other than grade papers and prepare the next lesson.

When practices in Asian schools are examined, it becomes clear that there are ways to gain large amounts of time, particularly if some of the assumptions cited above are challenged. Stevenson and Stigler (1992) describe a discussion they had with teachers in Beijing regarding teachers' workday issues:

> When we informed the Chinese teachers that American elementary school teachers are responsible for their classes all day long, with only an hour or less outside the classroom each day, they looked incredulous. How could any teacher be expected to do a good job when there is no time outside of class to prepare and correct lessons, work with individual children, consult with other teachers, and attend to all the matters that arise in a typical day at school! Beijing teachers teach no more than three hours a day, unless the

> teacher is a homeroom teacher, in which case the total is four hours. During the first three grades the teaching assignment includes both reading and mathematics; for the upper three grades of elementary school, teachers specialize in one of these subjects. They spend the rest of their day at school carrying out all their other responsibilities to their students and to the school. The situation is similar in Japan. According to our estimate, Japanese elementary school teachers are in charge of classes only 60 percent of the time they are at school. In fact, Japanese law limits the amount of time a teacher may spend in front of a classroom to twenty-three hours for a six-day week—no more than four hours a day.
>
> Large amounts of nonteaching time at school are available to Asian teachers for two reasons. The first is the larger class size. By having more students in each class but the same number of teachers in the school, all teachers can have a lower teaching load.... Although class sizes are large, the overall ratio of students to teachers within a school does not differ greatly from that in the United States.
>
> The second factor increasing the time available to Japanese and Chinese teachers is the greater number of hours they spend at school each day. Teachers in Sendai, Beijing, and Taipei spent an average of 9.5, 9.7, and 9.1 hours per day, respectively, compared to only 7.3 hours for the American teachers. Asian teachers arrive at school early and stay late, which gives them time to meet together and to work with children who need extra help. Most American teachers, in contrast, arrive at school shortly before classes begin and leave not long after they end. This does not necessarily result in a shorter work week for American teachers. What it does mean is that they must devote their evenings and weekends to schoolwork. (pp. 163-64)

I expect that most American teachers would object to adopting the Asian model, but not necessarily because they would not want to spend more hours at school. American teachers, by and large, are competent and hard-working. But many *would* find it hard to let go of the notion that the best, perhaps only, solution to all educational problems is smaller class size. Teachers and parents tend to accept as dogma that smaller is better. Getting them to question this assumption and to explore alternative organizational and grouping arrangements will be quite difficult in many cases.

Part of the challenge is to get away from thinking in terms simply of smaller versus larger classes. Alternative instructional arrangements are possible, as was suggested in previous chapters. For example, children can take more responsibility for themselves and for other children. Other strategies allow different types of adults to work with groups of children in varying capacities, instead of all interaction being controlled by certified teachers.

In summary, time must be provided to support the types of changes being suggested as necessary for education to adapt to the needs of the twenty-first century. Major companies recognize the need to provide time and resources for change, and often take charges against their profits to acknowledge the time and money that must be allocated for a major change to take place. Schools do not seem to have factored time into the change equation, at least not before the fact. More often, a change is identified and provisions for finding the time to master the necessary skills are addressed later.

Adelman and Pringle (1995) studied fourteen schools that applied a wide range of approaches to "breaking the mold in structuring and using time in education." Their study concluded that

> most mainstream administrators, school boards, and taxpayers underestimate how much time is needed for school faculty members to individually and collectively imagine and examine radically different conditions of schooling; to coordinate efforts to experiment and then institutionalize the most worthwhile, discard the unacceptable, and refine the rest; and to maintain simultaneously the daily functioning of the school....
>
> The single obstacle that... has not [been] surmounted is a lack of time. Some schools in this study completely overlooked the need for time to rethink and restructure the educational environment, while others recognized time as a central issue and made efforts to address it. But across all sites, the process of school reform has taken more time than was initially allocated to it. (p. 29)

If schools are to change successfully (and continuously), the time needed for change will have to be built into the structure of schooling in any of several ways, including changes to the daily, weekly, yearly, and vacation schedules and greater use of sabbaticals, collaborative and team-teaching models, parent volunteers, project learning, student offsite learning, and other strategies that free up teachers during the school day.

In the end the challenge will be for educators to stop doing some of the things they do now so they can find time to adopt new methods. The trick will be to eliminate certain practices as new ones are adopted. Time can be found as well as saved. If all change is thought of as additive, the needs of time can never be met. If new activities and programs replace old ones, time can often be found by eliminating an activity that is time-consuming but not necessarily very efficient or effective. A careful review of current practice can often identify activities that take up much teacher and administrator time but yield little in terms of improved student performance. Schools will need to be ready to make the difficult decisions to give up some things that are familiar and routine if they are to gain more flexibility with the finite resource of time.

PROFESSIONAL DEVELOPMENT

When time can be found, the primary use of it will be for professional development. Any change in schooling will require teachers to be trained or retrained (using the traditional language of inservices) and will be more effective if teachers construct their own understandings and make individual applications to practice (using the new language of constructivist professional development). Teachers will need both: specific skill training along with opportunities to process and apply new understandings and techniques individually and collectively.

The notion of teacher training has undergone a metamorphosis over the past thirty years. One-shot inservices or unrelated summer courses at the local college (to progress on the pay scale) once were the dominant and accepted mode of skill improvement. Then came the "staff development" phase of the 1980s when districts or schools adopted structured programs such as Madeline Hunter's Mastery Teaching. Application-oriented approaches like peer coaching grew in favor as teachers began to have more control over interpreting knowledge in practice. This trend culminated with programs in the 1990s that focused squarely on teacher knowledge-generation and interpretation. Darling-Hammond (1996) recaps some recent attitudes toward teacher professional development:

> As recently as 10 years ago, the idea that teacher knowledge was critical for educational improvement had little currency. Continuing a tradition begun at the turn of the 20th century, policymakers searched for the right set of test prescriptions, textbook adoptions, and curriculum directives to be packaged and mandated to guide practice. Educational reform was "teacher proofed" with hundreds of pieces of legislation and thousands of discrete regulations prescribing what educators should do.
>
> More recent efforts differ from past strategies that did not consider how ideas would make it from the statehouse to the schoolhouse. New initiatives are investing in the front lines of education. Policymakers increasingly realize that regulations cannot transform schools; only teachers, in collaboration with parents and administrators, can do that. (p. 5)

Activities such as action research, reflective practice, inquiry, journal writing, and others that revolve around the teacher as knowledge generator are much more common components of school-based professional-development programs. The aims of this type of development are to enable the teacher to be a self-sufficient learner who is less dependent on external "experts," and to enable the school to become a "learning organization" so that it nurtures and sustains teacher growth and development on a continuing basis.

The other important change in professional development in the 1990s is a focus back on subject knowledge and academic disciplines as the basic organizers for professional development. While generic pedagogical techniques remain important, recent understanding of how students process new knowledge has led to more subject-focused development models (Brophy 1992).

Acquarelli and Mumme (1996) describe the importance of professional development to the Middle Grades Mathematics Renaissance project, a component of the California Alliance for Mathematics and Science, a State Systemic Initiative funded by the National Science Foundation. The project uses professional development as its central strategy to help middle schools transform mathematics programs so that all students become capable with mathematics. The project encompasses 1,650 teachers from 420 schools participating year-round in work focused on professional development, including

> discussing mathematics reform, experiencing hands-on mathematics, learning how to teach new state-of-the-art curriculum "replacement" units, and exploring the conditions that create the opportunities for learning [mathematics]. (Acquarelli and Mumme, p. 479)

The project employs a multidimensional, multilevel model of professional development that acknowledges the varied needs for support teachers have when adopting dramatically different or unfamiliar teaching techniques.

> One critical lesson for us has been that change requires teachers to become part of a professional learning community. The Professional Teaching Standards of the National Council of Teachers of Mathematics call for "classrooms as mathematical communities." Likewise, we believe that teachers need to belong to learning communities that place inquiry at the center and that focus on building capacity for further learning. Experience has shown that faculty members rarely have opportunities to engage in professional dialogue with other faculty members, let alone with colleagues beyond the school walls. The Renaissance fosters conversations in individual schools about the teaching and learning processes. Each school is also part of a cluster, which promotes interaction with teachers from other schools, often within the same district. Teachers participate as well in a network of teachers from schools throughout a broad geographic region, which increases their opportunities for exposure to diverse ideas. And they are part of a statewide network of educators that provides momentum and widespread support for change.... (p. 481)
>
> [We have also learned] that professional development must be grounded in classroom practice. The real hope for making broad-scale changes lies in the ability to tie the professional discussions and examinations to what's going on in classrooms. Teachers must experience reforms in their own

> classrooms and have opportunities to grapple with the difficulties that arise. Focusing the talk on curricular units has been particularly helpful to the process. Teachers have attended unit workshops and then taught the units while cluster leaders observed them. They've brought questions, concerns, and successes to their cluster meetings and shared their students' work with their colleagues. Their experience with alternative curricula has prompted examination, inquiry, and collaboration. This approach has allowed teachers to be exposed to big mathematical ideas in coherent, practical-sized chunks—pieces small enough to seem manageable to even the most reticent. (Acquarelli and Mumme, p. 482)

Licklider (1997) offers a general and more "comprehensive model of faculty development" and describes how it operates hypothetically:

> The model of faculty development is driven by what participants already know. It begins where faculty members are and recognizes their prior knowledge and experience. The goal is to help faculty members move from where they are to where research says they would be more effective by providing opportunities to try more effective behaviors and reconstruct knowledge about the target area of development.
>
> Large-group sessions introduce new strategies and provide opportunities to practice and process in safe settings. Expanded learning opportunities increase chances to shape new skills and reflect on effects and meaning. Both learning opportunities help participants modify assumptions, beliefs, and behaviors.
>
> The "meanings" participants bring to each target area are challenged by research identifying behaviors that have a positive effect on the ultimate outcome and by participants' experiences in the classroom. As they become more effective in one aspect of the target area, participants challenge other beliefs and assumptions. The content of the program thus addresses aspects of the target area for school renewal when raised by participants.
>
> Program goals and objectives focus on behaviors that have a positive effect. The safe environment encourages participant interaction and experimentation with alternative behaviors. Educational developers also help transfer control to participants and ultimately become participants in the program. Effective support from the principal encourages participation and risk taking.
>
> Incorporated within the model are practical applications of three insights from research about learning identified by Leinhardt (1992):
>
> - There are different kinds and amounts of knowledge.
> - Prior knowledge influences how one constructs meaning and processes new information.
> - Learning is a social act.
>
> All have important implications for helping educators learn, and the model honors the potential impact of the lessons about learning. (Licklider, p. 18)

Joyce and Calhoun (1996) present the lessons learned from studying successful school-improvement processes in five schools where professional development was addressed extensively and effectively. In this research-grounded model of school improvement, professional development is primarily a process of inquiry. The model is "a reprise of the trends of the times." The focus is on

> the school's capacity to improve the learning capability of the students and the faculty. The process is one of school-based inquiry, involves the total faculty, builds community, serves to increase student learning through the study of instruction and curriculum, and seeks to provide a nurturant organization through collective study of the health of the school. (p. 180)

Professional development is another critical linchpin in the restructuring process. There is no simple model or program that will work in all schools. Instead, schools will need to focus development on those areas most closely linked to successful classroom practice, and generally grounded in an academic discipline. Teachers will need more than instruction in a new technique. They will require opportunities to understand, practice, and refine the technique. They will need to visit and compare experiences with other teachers engaged in similar tasks. They will need training that they can apply directly in the classroom but that is not simply prescriptive. They will benefit from membership and participation in networks that allow them to connect with like-minded colleagues within a district, region, or state.

These new models of professional development are demanding, but have shown they can result in successful adoption and implementation of new teaching techniques, something that cannot be said for much of the training offered over the past thirty years. Restructuring schools will want to become adept at nurturing professional development on a variety of levels.

THE CRITICAL ROLE OF THE PRINCIPAL

Principals remain a key variable in modifying school culture and guiding the change process (Dwyer 1984 and 1986, Fullan 1985, Smith and Andrews 1989). However, many principals are unable to see how they will be successful in a new organizational structure where they may not be at the center of power. Hallinger, Murphy, and Hausman (1991) report that "principals viewed the effects of restructuring on themselves almost exclusively in terms of power. They forecast new roles with fewer decisions to make by themselves leading to a loss of control and power."

Bredeson (1991) considers principals' reactions to restructuring from the perspective of role anxiety. He discusses the degree to which "role strain" caused stress among the principals he studied.

> Even under the most optimal of conditions, shifts in role and in role expectations produce varying degrees of role strain, defined... as acute affective/cognitive disturbance for an individual role holder manifested as anxiety, discomfort, uneasiness, perplexity and/or general distress....
>
> The responses to interview questions revealed that each of these principals was experiencing varying states and levels of anxiety manifested in feelings of having lost control, fear of failure, self-doubts about personal competence and ability to be successful, impatience and frustration, loss of identity, and increased feelings of uncertainty brought about by significant changes in their professional worklife. The whole notion of letting go of one set of professional functions and identities while learning others was described as risky, wearisome, and frustrating. (pp. 10-11)

One key link in restructuring may be to enable principals to see what their new roles will look like, and to help them to develop the skills necessary to be successful in these new roles. While this same recommendation also applies to teachers, it may be overlooked in the case of principals, who are expected, in many cases, to be largely responsible for their own professional growth and development. Given the ability of the principal to make or break innovations in schools, it is critical for them to see how they can be "winners" in any restructured system.

The notion of principals and teachers as fellow voyagers in this journey toward restructured schools suggests new relationships between them, as outlined in part 2. The National LEADership Network Study Group on Restructuring Schools (Mojkowski and Bamberger 1991), in its study of how to develop leaders for restructuring schools, lists twelve activities in which such leaders should engage. These activities appear to be consistent with those being practiced by principals in schools where the process of restructuring has been observed (Louis and Miles 1990; Goldman, Dunlap, and Conley 1993). Leaders, says the study group, do the following:

- *Create dissonance.* Using a variety of methods, new leaders constantly remind staff and others of the gap between the vision that they have for their children and their current actions and accomplishments. They use this dissonance to create a press for improvement.
- *Prepare for and create opportunities.* They exhibit a constructive and creative opportunism. They pursue opportunities that will move the school closer to the accomplishment of its mission and ignore those that do not.
- *Forge connections and create interdependencies.* They create new roles and relationships. They dismantle the egg-crate structure of schools and

create opportunities and processes to connect teachers within and across disciplines and to connect people inside and outside of the school community to one another. By skillfully creating interdependencies, leaders create the consensus for understanding and action that is required in restructuring environments. The analogy to an orchestra leader is often employed to describe the subtle ways in which these leaders bind independent entrepreneurs to a shared vision and mission.

- *Encourage risk taking.* School people typically are uncomfortable with taking risks. Premature and arbitrary judgments too often inhibit creativity and risk taking. Leaders of restructuring schools create environments and conditions that provide increased comfort with making mistakes and learning from them. These leaders protect risk takers from premature judgments of failure.
- *Follow as well as lead.* Leaders recreate themselves throughout the organization, nurturing leadership behaviors in all staff. They lead through service rather than position, providing support and good "follow-ship" to ad hoc leaders.
- *Use information.* Administrators in restructuring environments use a wide variety of information about student and organizational performance. They are clear communicators who use multiple channels for accessing and distributing information. They create new ways to think about and measure the growth and productivity of learners and the learning process. Leaders use research and practice information to guide innovation and change. They monitor and document the implementation process.
- *Foster the long view.* Impatience is a prominent American virtue with serious side-effects. Leaders know when and how to delay judgment, tolerate and learn from interim set-backs, and invest for long-term yields. They know "when to hold them, and when to fold them," guided by their sense of mission and strategic direction. They work incrementally within a comprehensive design of restructuring, guided by their vision of learners and learning. The special requirements of restructuring—moving incrementally within a comprehensive design—require a highly skilled leader and facilitator.
- *Acquire resources.* They are particularly adept at resource acquisition and distribution and finding flexible resources through competitive grants and assistance from businesses and community organizations. They practice resource reallocation and cost containment. They have a simultaneous macro- and micro-orientation, identifying pockets of readiness and resistance and allocating resources accordingly. They find time for staff to plan and develop.
- *Negotiate for win-win outcomes.* They work constructively and creatively with teacher representatives within the collective bargaining agreement. They use the collective bargaining process to forge new professional agreements dealing with the teaching and learning process.

- *Employ change strategies.* The research on change management contains ample tools for analysis and intervention. Leaders are skilled in analyzing concerns and levels of commitment. They configure the right mix of strategies and tactics to keep new undertakings on track through all stages of an improvement effort. These leaders are change strategists, recognizing the dynamics of their organization and determining the potential for change.
- *Provide stability in change.* The elimination function (the deliberate abandonment of elements of the organization that have not worked previously) needs to be accompanied by a framework that provides stability while the changes are taking place. Restructuring leaders construct a scaffolding for the organization and its people so that they can experiment with new ideas, take risks, and dismantle some aspects of the organization without losing a sense of the overall framework in which they are working. These leaders provide order and direction in an ambiguous and uncertain environment.
- *Grow people while getting the work accomplished.* Formal staff development is only one means of developing staff and others in the school community. Often the most powerful learning is accomplished while meaningful work is being done. Leaders help staff to move, in their thinking and behavior, beyond the limits of their own experience. They create self-managing and self-learning groups and invest heavily in staff development. They identify and nurture potential leaders to ensure that the foundation for restructuring will endure beyond their tenure. (Mojkowski and Bamberger 1991, pp. 28-31)

Sagor's (1992) study of three principals who "make a difference" suggests that simply assigning more authority to principals in the absence of role redefinition is unlikely to lead to major educational improvements. Principals need to be in the business of developing a clear, unified focus, creating a common cultural perspective, and supporting a constant push for improvement.

This new style of leadership may have as its hallmark the ability of the leader to sublimate her or his ego to the collective needs and potentialities of the organization. This does not mean surrendering decision-making responsibility or adopting a laissez-faire style of leadership. It does suggest a very difficult balancing act requiring the principal to have a vision of education, but allowing that vision to be shaped and modified by others. The ultimate goal is to have one collective vision with broad ownership that incorporates elements of the principal's vision and of other members of the school community.

Sergiovanni (1990) describes this new style as *leadership by bonding*, where the leader, having aroused human potential, satisfied higher needs, and raised expectations of leader and followers, then arouses awareness and consciousness that "elevates organizational goals and purposes to the level of a shared covenant and bonds together leader and followers in a moral commitment" (p. 25). The model is one of shared commitment and vision. This can be very difficult to accomplish in environments where the principal is "in charge" and is the primary, or sole, source of direction for school improvement or change.

LESSONS FROM OREGON'S '2020' SCHOOLS

Goldman, Dunlap, and Conley (1991, 1993) studied selected schools that appeared to be restructuring with some success. These schools were all participants in a state-sponsored competitive grant process—known as the "2020 program"—that awarded funds for school improvement. The study identified four key conditions within the program that supported successful school-site restructuring. In these schools staff were found to be ready, the principal was supportive, some sort of common "vision" was shared, and the "system" did not get in the way.

These schools were adaptive. They were experimental. Their directions may have originally been rooted in someone else's "master plan" for reform, but they were modified again and again to meet the needs of the specific site. These school people were free to determine their own directions as events unfolded. They were able to develop and implement *nonstandardized solutions* to school reform.

The Oregon Legislature empowered teachers by requiring that they both write the 2020 grant proposals and administer the subsequently approved projects. These constraints encouraged the creation of an environment in which teachers and administrators could develop the skills and behaviors necessary to share decision-making responsibilities. The projects provided school staffs with real reasons to solve problems, seek consensus, and communicate.

There is clear evidence that these schools were actively involved in decision-making around the central variables of restructuring (learner outcomes, curriculum, instruction, and assessment) and that this involvement was integrally related to the success of the projects they undertook (D. Conley, March 1991). Principals and teachers in the 2020 schools appear to have developed the capacity for—and expectation of—central involvement in determining the goals and conditions of their work.

The collaborative site vision-building process forced teachers and principals to spend time sharing ideas and talking to one another about school goals. The discussion of common goals provided guidelines for decision-making that were legitimate in educators' minds and that apparently allowed principals to feel more comfortable about ceding some of their traditional areas of authority to teachers.

Facilitative leadership, especially by the principal (see chapter 18), made significant contributions to the changes that emerged in the 2020 schools. Facilitative leadership was important because people—not reforms, not regulations, not rules—were key to achieving significant change in these schools. In these successful projects, educators shared power in ways that made greater sense to them. They operated outside the structure of traditional hierarchical power relationships.

This study also hinted that state legislatures, or even individual school districts, may be successful using small amounts of money on a competitive basis continually to encourage innovation and experimentation, a sort of ongoing "Hawthorne effect" to help support risk-taking and experimentation in schools. At the same time, unless careful attention is paid to creating the proper conditions, legislative support for site-based reform can as easily lead to doing nothing, or worse, as it can to opening the way to successful local adaptation.

This description of the 2020 schools helps integrate some of the themes presented through part 4. Issues of leadership, vision, culture, and system alignment were addressed in these schools in ways that allowed them to change rather rapidly and successfully. Their experience provides a glimpse at some of the conditions that need to be in place to enhance the success of schools that choose to take the "next step" on the road to restructuring.

CHAPTER 25

WHERE ARE WE HEADED?

Where is all this pressure for change in education leading? What do we know about current efforts to redesign schools radically? What would schooling and schools look like if the type of restructuring described in this book were to take place? This chapter briefly entertains each of those questions as a jumping-off point for schools that wish to engage in serious conversations about changing the way they do business.

WHAT DO WE KNOW ABOUT RESTRUCTURING?

Although few, if any, schools have completely restructured, we do know something about the effects some educational changes have had in schools.

As early as 1993, results were being reported from an evaluation of a group of schools in the Jefferson County Public Schools in Louisville, Kentucky. These schools had received intensive professional development of teachers and administrators directly linked to the innovations being put into place in the school. An evaluation by Regina M. J. Kyle, president of the Kyle Group, divided the district's 131 schools into three groups: those that had made a sustained commitment to school restructuring over a three- to five-year period; those that had adopted a series of often-unrelated projects; and those that had made few changes. Fifty-two schools were then studied. Schools in the first group were paired with schools in the other two and standardized-test scores were compared.

> The study found that, across all levels of education, schools engaged in systemic reform outperformed both sets of comparison schools.
>
> - [Restructuring] schools increased the percentage of students above the 50th percentile on the Comprehensive Test of Basic Skills [C.T.B.S.] 88 percent of the time, compared with 50 percent of the time for students in [unrelated projects] schools and 58 percent for those in [status quo] schools.
> - Students in [restructuring] schools improved at an average rate of 8.3 percent a year on the C.T.B.S., compared with 2.6 percent for those

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> in [the unrelated projects schools] and 5.5 percent for those in [status quo schools].
>
> - Rates of student attendance, parent and student satisfaction, and parental involvement increased—and student-suspension and -retention rates decreased—83 percent of the time in [restructuring] schools. In [unrelated project] schools and [status quo] schools, the rates in the two categories improved 44 percent and 50 percent of the time, respectively. (Olson, February 10, 1993, p. 5)

Another study in Kentucky, this time of the ambitious state-level reform and restructuring activities initiated as a result of the Kentucky Education Reform Act of 1990 (Steffy 1993), concluded that the reforms were having a positive effect on student learning statewide (Olson 1994). The Kentucky study found that fourth-, eighth-, and twelfth-graders demonstrated "dramatic improvement" on the 1993-94 version of the state's annual assessments. In all grades, the percentage of students performing at or above the proficiency level in mathematics, reading, science, and social studies increased from the previous year. In reading, the percentage of fourth-graders scoring at the proficiency level increased from 7 to 12 percent. At grade 12, the figure rose from 5 to 14 percent.

Lee and Smith (April 1994, Fall 1994) conducted a statistical analysis of schools drawn from the National Educational Longitudinal Study of 1988 (NELS), a "general-purpose study of the educational status and progress of a large sample of students and schools sponsored by the National Center for Educational Statistics." Students were followed from middle school to the sophomore year in high school. Using data from NELS, the researchers identified "a large set of individual practices which describe a school's structure. This list captures important elements of how American secondary schools define their efforts toward reform." Their results can be summarized as follows:

> Considering school restructuring in terms of either school structural practices or school size, the pattern of effects on the cognitive learning of students in the early years of high school found in this study is clear, consistent, and strong. Students attending schools that are restructured learn more in mathematics, reading, history, and science achievement. Those who attend schools which are not restructured learn less....
>
> Schools [that are restructured] are more equitable environments in terms of the distribution of cognitive learning. Conversely, in schools that have not restructured, and in larger schools, students learn less and learning is more stratified. While general levels of learning are lower in those schools, socially disadvantaged students learn even less. (Lee and Smith, pp. 22-23)

Newmann and Wehlage (1995) draw from three studies in addition to the NELS data to reach the conclusion that a positive effect on learning occured when schools taught a challenging curriculum in a fashion that engaged students intellectually, when they assessed learning in a variety of more "authentic" ways, and when they made supporting changes in school structure. Newmann and Wehlage analyzed three studies:

• The School Restructuring Study (SRS) included twenty-four significantly restructured elementary, middle, and high schools. Each was studied intensively for three years, including two weeks of onsite research each year that included classroom visitations and observations. The study was conducted under the direction of the Center on Organization and Restructuring of Schools (CORS).

• The Longitudinal Study of School Restructuring comprised four-year case studies of eight schools that had engaged in different forms of restructuring in four communities. Researchers spent about fifteen person-days per year observing and interviewing at each school, along with other forms of data collection.

• The Study of Chicago School Reform encompassed survey data from 8,000 teachers and principals in 400 elementary and 40 high schools. Surveys provided information on instruction, climate, organizational features, professional activities, parent relations, and reform activities.

Newmann and Wehlage's findings tend to confirm the tenets of the restructuring model presented in this book. In particular, restructuring that is centered on those variables most closely related to student learning tends to yield improvement in student learning, while programs and projects focused primarily or entirely on the enabling or supporting variables show much less consistent effects on learning:

> New administrative arrangements and teaching techniques contribute to improved learning only if they are carried out within a framework that focuses on learning of high intellectual quality. Such learning engages students in constructing knowledge, through disciplined inquiry, to produce discourse, products, and performances that have value beyond certifying success in school. Student learning can meet these high standards if educators and the public give students three kinds of support:
>
> - Teachers who practice authentic pedagogy.
> - Schools that build organizational capacity by strengthening professional community.
> - External agencies and parents that support schools to achieve... high quality student learning.

> The CORS studies have shown that authentic pedagogy contributes equitably to student learning, whether measured according to standards for authentic pedagogy or in more conventional ways.... (Newmann and Wehlage, p. 51)

Newmann and associates (1996) identify three criteria that define authentic pedagogy: (1) construction of knowledge, (2) through disciplined inquiry, (3) to produce discourse, products, and performances that have meaning beyond success in school (p. 27). In the School Restructuring Study, they studied about 130 classrooms in 24 restructuring public schools equally divided among elementary, middle, and high schools. They found that even in these carefully selected schools, the level of authentic pedagogy fell well below what might be expected in a fully restructured school. However, some schools and some teachers were successful in "focusing their teaching squarely on high standards of high intellectual quality."

The study further found that "authentic pedagogy does pay off in improved authentic academic performance for students at all grade levels and in both mathematics and social studies" (p. 69). Although the researchers freely admit the limitations of their study and findings, they conclude by stating that

> as a whole, the findings support the pursuit of authentic pedagogy to help cultivate authentic academic performance for students. Findings on the generally low levels (and considerable within-school variability) of authentic pedagogy indicate that the task is enormously difficult, even in restructuring schools. Nonetheless, some schools did deliver high-quality pedagogy to their students. (Newman and others 1996, p. 70)

Another ambitious effort to create new visions of education is the New American Schools Development Corporation (NASDC), which held a competition in fall 1991 and spring 1992 to solicit designs for "break the mold" schools. The results from this competition were announced in July 1992 . Of 686 proposals submitted, 11 design teams were selected and provided funding "to pursue their visions of radically different and more productive schools" (Olson, August 5, 1992). The teams were given one year to prepare to compete in a second phase with additional funding available.

Phase 2 provided the teams two additional years, through June 1995, to demonstrate the effectiveness of their designs in real-world settings. At the end of phase 2, the number of teams was reduced to seven. These teams were then expected to work with an increasing number of schools in districts throughout the country. This initiative is based on the notion that if clear alternative models are created, schools will then be able to see how education can and should be different and will then move toward these more effective models voluntarily. The NASDC sites were to be the bridges between vision and practice.

The RAND Corporation was invited to evaluate the relative effectiveness of these designs and their implementation. Its initial formative evaluation contained the following general conclusions about the role that a visionary modeling process can play in reconceptualizing schooling:

> New schools created in response to NASDC... had a difficult time making progress toward the NASDC reforms simply because they had formidable obstacles in terms of growth and administrative issues within the first few years of existence that drained energies away from reform. The culture of a new school, while in some ways pliable, is at the same time often chaotic and inhospitable to reasoned change and reform. The experiences of new schools associated with [various NASDC projects] proved this out. (Bodilly 1996, p. 99)

The RAND evaluation seemed to confirm the basic premises of the Dimensions of Restructuring model and of the Process of Restructuring cycle presented in the introduction to part 4:

> Within a short period of time, concentration on change in the core elements of schooling appeared to have highest payoff. Sites floundered when they took on too much too soon....
>
> Some elements simply are not predisposed to quick implementation and develop at a different pace than others, most especially those that require coordination with external actors who are not at the beck and call of schools ([e.g.] social service integration) or those that require a process of learning by multiple actors (changed governance structures and public engagement). Importantly, some changes in these areas are necessary for the institutionalization of each of the designs and cannot be avoided in the long term....
>
> Many barriers to the process of school transformation exist, especially in the areas of professional development, school autonomy, and conflicting cultural values and assessments that work against change. These barriers require stronger public engagement by design teams and schools, but even this would not overcome the lack of influence over important actors that is missing from the "design team" model of school transformation. So far, whole-school designs and design-based assistance are limited vehicles to reform and must be coupled creatively with other efforts....
>
> Our findings also indicate that teachers and administrators cannot operate effectively to change their behaviors without concrete supports offered to all parties, such as materials, models, facilitators, teaming, and non-instructional time. These supports require funding at the school level.
>
> In addition, the experiences of schools we sampled indicated that initial commitment to a design was not always achieved and could be fleeting without long-term support. Long-term commitment by teachers is devel-

> oped over time in a working relationship where a team and a school staff interact with each other toward common goals. Commitment comes when teachers are supported and begin to see the results of their efforts. Beautiful-sounding ideas or visions do not engender the day-to-day work needed to transform a school. Strong assistance in understanding what needs to be changed, concrete models, coaching, and time produced change and therefore more commitment. It is the spiraling process of discovery and recommitment that transform (sic) a school (McLaughlin 1990). (Bodilly 1996, p. 83)

Reports of research on the Coalition of Essential Schools (Muncey and McQuillan 1993; Prestine and Bowen 1993; Viadero, November 1, 1995) indicate similar conclusions regarding the difficulty of restructuring over a range of sites utilizing a variety of strategies when the sites are not necessarily receiving long-term support and are not required to demonstrate commitment and focus. The Coalition is composed of over 1,000 high schools that voluntarily agree to pursue the Coalition's nine Common Principles. There are no formal measures of the degree to which members of the Coalition actually pursue the principles. The principles include:

1. The school should focus on helping adolescents learn to use their minds well. Schools should not attempt to be "comprehensive" if such a claim is made at the expense of the school's central intellectual purpose.
2. The school's goals should be simple: that each student master a limited number of essential skills and areas of knowledge. While these skills and areas will, to varying degrees, reflect the traditional academic disciplines, the program's design should be shaped by the intellectual and imaginative powers and competencies that students need rather than necessarily by "subjects" as conventionally defined. The aphorism "less is more" should dominate. Curricular decisions should be guided by the goal of thorough student mastery and achievement rather than by the goal of merely covering content.
3. The school's goals should apply to all students, but the means to these goals will vary from student to student. School practice should be tailor-made to meet the needs of every group or class of adolescents.
4. Teaching and learning should be personalized to the maximum possible extent. Efforts should be directed toward a goal that no teacher have direct responsibility for more than eighty students.
5. The metaphor of the school should be student-as-worker rather than teacher-as-deliverer-of-instructional-services. Accordingly, a prominent pedagogy will be coaching, to provoke students to learn how to learn and thus to teach themselves.
6. Students entering secondary school studies are those who can show competence in language and elementary mathematics. Students of

traditional high school age but not yet at appropriate levels of competence will be provided intensive remedial work to assist them quickly to meet these standards. The diploma should be awarded upon a successful final demonstration of mastery for graduation—an "exhibition." This exhibition by the student of his or her grasp of the central skills and knowledge of the school's program may be jointly administered by the faculty or by higher authorities. As the diploma is awarded when earned, the school's program has no strict age grading and no system of credits earned by time spent in class. The emphasis is on the students' demonstrating that they can do important things.

7. The tone of the school should explicitly stress values of high expectation, trust, and decency. Incentives appropriate to the school's particular students and teachers should be emphasized, and parents should be treated as essential collaborators.
8. The principal and teachers should consider themselves generalists first and specialists second. Staff should expect multiple obligations and a sense of commitment to the entire school.
9. Ultimate administrative and budget targets should include, in addition to total student loads per teacher of eighty or fewer pupils, substantial time for collective planning by teachers and competitive salaries for teachers. Per-site costs should be within 10 percent of traditional schools. Some services offered in traditional comprehensive high schools may have to be eliminated to accomplish this. (Sizer 1992, pp. 28-29)

Muncey and McQuillan (1993) found that schoolwide change was difficult to achieve in member schools. Although many innovative projects and activities were undertaken in the schools, restructuring was often equated with these programs, and the school's involvement in the Coalition was also defined in terms of these specific projects. In other words, the schools did not necessarily embrace the Common Principles; instead, a group of teachers pursued the principles within a structure that was neutral to actively hostile to those principles. The findings can be summarized from Muncey and McQuillan (1993) as follows:

1. In most of the schools there was not a consensus that fundamental changes in school structure or teaching practices needed to occur.
2. The changes that occurred or were considered when a school joined the Coalition forced the issue of what constituted the school's philosophy and revealed differences in faculty members' perceptions of their jobs, of the school's mission, and of the best ways to educate students.
3. The usual starting points for reform were principles that individual teachers (or small teams of teachers) could attempt to apply with little disruption to the school as a whole.
4. At most schools, a core of faculty members became active in their school's reform, but their efforts often ended up dividing the faculty.

5. Most Coalition supporters were naive about the degree to which school reform could be effected by focusing on academic concerns and about issues of power and politics within their schools.
6. The divisions created within schools as a result of Coalition membership restricted communication among the faculty, and responses to changes were often based on hearsay.
7. Schools assumed that once the faculty "accepted" a reform program, there was little need for further reflection on this decision.

The research on restructuring opens the possibility that schools can improve student learning by changing practices and programs dramatically. Reports from pioneering efforts also indicate how extremely difficult it is to remake schooling in America.

In the next two sections, I offer two comprehensive visions of restructured schooling. The first one was developed by a national panel charged with presenting a new view of the American high school; the other is a product of my own reading, writing, and experiences working with schools that are trying to restructure.

Although neither of these visions is likely to occur anytime soon, they offer a framework for educators and educational stakeholders to use as they ponder the directions they would like their schools to take.

These sketches are meant to be provocative more than to be guides. They can serve to stimulate discussion and to incite questioning of assumptions long untested. They can challenge, and perhaps even inspire. They open a view of the future of education that is not easy to see when one is "in the trenches" 180 days out of the year.

These visions of education attempt to knit together much of what has been presented in the preceding chapters as well as a few additional areas of change that must be considered, particularly when one thinks about change not as school-based, but as systemic in nature.

A VISION OF A RESTRUCTURED HIGH SCHOOL

This vision of schooling was developed by the Commission on the Restructuring of the American High School (1996), a broadly representative group assembled by the National Association of Secondary School Principals in partnership with the Carnegie Foundation for the Advancement of Teaching. Although the vision was created with the high school in mind, much of it can readily be applied to education at all levels.

The commission's report identifies thirteen areas grouped into three headings: Priorities for Renewal, A Web of Support, and Letting Leadership Blossom. These thirteen areas incorporate the twelve dimensions of restructuring presented in this book along with other issues and dimensions as well. Listed here are the commission's recommendations.* (I urge readers to obtain the report for its discussion of the rationale for each recommendation and suggestions for implementation.)

Priorities for Renewal

Curriculum

1. Each high school community will identify a set of essential learnings above all, in literature and language, mathematics, social studies, science, and the arts in which students must demonstrate achievement in order to graduate.
2. The high school will integrate its curriculum to the extent possible and emphasize depth over breadth of coverage.
3. Teachers will design work for students that is of high enough quality to engage them, cause them to persist, and, when successfully completed, result in their satisfaction and their acquisition of learnings, skills, and abilities valued by society.
4. The content of the curriculum, where practical, will connect itself to real-life applications of knowledge and skills to help students link their education to the future.
5. Assessment of student learning will align itself with the curriculum so that students' progress is measured by what is taught.
6. Each student will have a Personal Plan for Progress to ensure that the high school takes individual needs into consideration and to allow students, within reasonable parameters, to design their own methods for learning in an effort to meet high standards.
7. The high school will promote co-curricular activities as integral to an education, providing opportunities for all students that support and extend academic learning.
8. A high school will reach out to the elementary and middle level schools from which it draws students to help those schools understand what kind of foundation students need for success in high school and to respond to the needs of the lower schools for policies at the high school that reinforce earlier education.

Instructional Strategies

1. Each high school teacher will have a broad base of academic knowledge with depth in at least one subject area.
2. Teachers will know and be able to use a variety of strategies and settings that identify and accommodate individual learning styles and engage students.

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* Commission on the Restructuring of the American High School. *Breaking Ranks: Changing an American Institution.* Reston, Virginia: National Association of Secondary School Principals, 1996. Excerpted with permission. For more information concerning this NASSP publication, call (703) 860-0200.

3. Teachers will be adept at acting as coaches and as facilitators of learning to promote more active involvement of students in their own learning.
4. Teachers will teach in ways that help students to develop into competent problem-solvers and critical thinkers.
5. Teachers will convey a sense of caring to their students so that their students feel that their teachers share a stake in their learning.
6. Teachers will utilize technology in their instruction in ways that improve student learning.
7. Teachers will integrate assessment into instruction so that assessment does not merely measure students, but becomes part of the learning process itself.

School Environment

1. The high school community, which cannot be value-neutral, will advocate and model a set of core values essential in a democratic and civil society.
2. Experiences in high school will acknowledge multiple talents and ways of learning to help students achieve the meaningful success that leads to further achievement.
3. Every high school student will have a Personal Adult Advocate to help him or her personalize the educational experience.
4. The school will accord meaningful roles in the decision-making process to students, parents, and members of the staff to promote an atmosphere of participation, responsibility, and ownership.
5. In order to maintain a positive environment, each high school will ensure that any student who brings a weapon into a high school, sells illegal drugs in the school, or behaves violently in the school will immediately forfeit the right to attend that particular school.
6. Agreements that school systems negotiate with teachers, principals, and other personnel will be accompanied by a Student Impact Statement to help warrant that contracts and other agreements consider the best interests of students.
7. Every school system will ensure that facilities used by its high schools are clean, attractive, safe, and well equipped.

Technology

1. School leaders will work with others to develop and implement a long-term strategic plan for use of technology in the school. The plan, including a code of ethics, will allow for ongoing changes in technology and adapt itself to continual changes in the school program.
2. Schools will make technology integral to curriculum, instruction, and assessment, accommodating different learning styles and helping teachers to individualize the learning process.

3. High schools will equip individual classrooms with the technology necessary to prepare students for life in the 21st century.
4. Budget allocations will be adequate to maintain current technology and to provide for ever-changing technology needs, including sufficient funds to permit access to all students and to use technology to deliver student services.
5. Technology will be a key part of both initial and continuing teacher education to provide teachers with the knowledge and skills they need to integrate technology into the curriculum and to adapt it to instructional strategies. To achieve these ends, school districts will hire teachers who can use technology to obtain information and who can incorporate technology into teaching and learning.
6. Every high school will designate a technology resource person to provide technical assistance and to consult with the staff to assist them in finding the people, information, and materials that they need to make best use of technology.

Organization and Time

1. High schools will create small units in which anonymity is banished.
2. Each high school teacher involved in the instructional program on a full-time basis will be responsible for contact time with no more than 90 students during a given term so that the teacher can give greater attention to the needs of every student.
3. High schools will develop flexible scheduling that allows for more varied uses of time in order to meet the requirements of the core curriculum.
4. The Carnegie unit will be redefined or replaced so that high schools no longer equate seat time with learning.
5. The high school will reorganize the traditional departmental structure to meet the needs of a more integrated curriculum.
6. Each high school will present alternatives to tracking and to ability grouping without restricting the range of courses and learning experiences it offers.
7. The academic program will extend beyond the high school campus to take advantage of learning opportunities outside the four walls of the building.
8. Schools will operate on a 12-month basis to provide more time for professional staff development, collegial planning, and the added instruction needed to promote better student learning.

Assessment and Accountability

1. The high school will assess the academic progress of students in a variety of ways so that a clear and valid picture emerges of what they know and are able to do.

2. The school will review each student's Personal Progress Plan continually and indicate the extent of progress toward graduation and postsecondary transition options.
3. High schools will guarantee that students can meet performance standards in entry-level jobs. Recent graduates who fail to meet these basic standards will have the opportunity to return to school for additional studies.
4. Each high school will report annually to the community, disclosing schoolwide assessment results and other pertinent information.
5. At least once every five years, each high school will convene a broadly-based external panel to offer a Public Description of the school, a requirement that could be met in conjunction with the evaluations of state, regional, and other accrediting groups.
6. Students will evaluate teachers and instruction on an ongoing basis in a variety of ways, providing regular feedback with regard to how effectively student learning goals are met.
7. Supervision of teachers will be thorough and ongoing, making use of the expertise of master teachers as well as administrators.
8. Principals and other administrators will use the highest standards of teaching as the criteria against which to evaluate teachers for determining their continued employment.
9. The high school staff will assess the principal and the administrative team's performance periodically in a variety of ways, providing regular feedback with regard to how effectively school goals are met.

A Web of Support

Professional Development

1. Every high school will be a learning community for teachers and for the other professionals it employs.
2. Each educator will create a Personal Learning Plan that addresses his or her need to grow, stressing knowledge and skills related to improved student learning.
3. The high school—with the help of the school district—will provide adequate funding, time, and other resources to ensure that professional development is a continuous, ongoing process.
4. The principal of a high school, as a model for the staff, will pursue his or her own ongoing professional growth while helping to lead the professional development for the entire school.
5. The support staff of a high school's secretaries, custodians, cafeteria workers, and others will also be encouraged and assisted in their own career growth and drawn into the larger school community as adults who can promote the well-being of students.

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Diversity

1. The principal, the school community, and the school board will promote policies, practices, and decisions that recognize diversity in accord with the core values of a democratic and civil society and within the mission of teaching and learning.
2. The curriculum will expose students to a rich array of viewpoints, perspectives, and experiences.
3. The teachers, adjunct teachers, paraprofessionals, support staff, volunteers, and members of the community who staff the high school will represent a wide array of talents, perspectives, and backgrounds.
4. The school will offer its staff substantive, ongoing professional development to help them deal with issues of diversity.

Governance

1. Boards of education will essentially follow the model of corporate boards in business and industry. They will take responsibility for adopting goals, policies, and standards of accountability; for approving the district's budget; and for hiring and monitoring the superintendent, who will be free to run day-to-day operations.
2. The superintendent will work collaboratively to build a vision for improving teaching and learning and attaining educational goals. He or she will educate the community about the needs of schools and nurture the development of shared leadership throughout the district.
3. Each high school will establish a site council to work with the principal in reaching decisions to make the school an effective organization for student learning.

Resources

1. Sufficiency of funding for education will be the top priority of state fiscal policy.
2. New programs mandated for high schools will be restricted to those that support learning objectives identified in national goals or endorsed by district and state policies. Furthermore, programs mandated by government should be fully funded from the level at which the mandate originates.
3. The agencies responsible for education at the local, intermediate, state, and federal levels will emphasize service to the individual schools.
4. Schools will go beyond regular, official funding sources to seek out supplemental resources wherever possible.
5. Decisions regarding budget and staff allocations will be made at the site level, in accord with policy parameters set at the central level so as to ensure the input of those who know the situation best.

Ties to Higher Education

1. High schools will engage in structured and formal communication with higher education to better serve the articulation of student learning.
2. Secondary and higher education will collaboratively develop new and consistent standards concerning college admissions requirements.
3. High schools will build partnerships with institutions of higher education to provide teachers and administrators at both levels with ideas and opportunities to enhance the education, performance, and evaluation of educators.
4. High schools will hire educators who have prepared for teaching by studying in high schools that model best practice.
5. Research by those connected with colleges of education should, whenever possible, concern itself with issues of teaching and learning affecting children in elementary and secondary schools in order to help improve practice.
6. High schools will hire only those teachers whose classroom preparation is provided in colleges and universities in which the teacher education program bears the stamp of external accreditation.

Relationships

1. A high school will regard itself as a community in which members of the staff collaborate to develop and implement the school's learning goals.
2. The high school will engage students' families as partners in the students' education.
3. High schools, in conjunction with agencies in the community, will help coordinate the delivery of health and social services for youth.
4. The high school will develop political and financial relationships with individuals and organizations in the community to foster ongoing support for educational programs and policies.
5. The high school will foster productive business partnerships that support and supplement educational programs.
6. High schools will form partnerships with agencies for youths that support and supplement the regular programs of the schools.
7. The high school will require each student to participate in a service program in the community or in the school itself that has educational value.

Letting Leadership Blossom

Leadership

1. The principal will provide leadership in the high school community by building and maintaining a vision, direction, and focus for student learning.

2. Selection of high school principals will be based on qualities of leadership rooted in established knowledge and skills that result in dedication to good instructional practice and learning.
3. Current principals will build and refine the skills and knowledge required to lead and manage change.
4. The principal will foster an atmosphere that encourages teachers to take risks to meet the needs of students.
5. The superintendent and other central office administrators, as well as school board members, will exercise leadership in support of the planning, implementation, and long-range momentum of improvement at the school level.
6. Teachers will provide the leadership essential to the success of reform, collaborating with others in the educational community to redefine the role of the teacher and to identify sources of support for that redefined role.
7. The leadership of students, parents, and others in the school community will enhance the work of the principal, who should recognize this potential for leadership by nurturing and supporting it.

A MORE PERSONAL VISION

One of the real challenges of restructuring is to fit all the different things about schools that need to change into a coherent picture of how schooling might look at some point in the future. This section offers one view of how restructured schools may look and function differently. This description is designed, as is much of this book, primarily to provoke thought and discussion, and to raise issues and possibilities for schools considering restructuring.

I do not think of this description as a set of goals schools should necessarily pursue. Nor do I think that many schools will do most of the things contained in this description in the near future. At the same time, it reflects what I strongly believe: the world has changed and eventually schools will change as a result. I see most of these changes as inevitable, the question being more when than whether.

My concern is that if schools respond too slowly, they will become marginal institutions; they will no longer be at the center of communities nor be the fabric that joins together and sustains the culture and society. The narrative that follows is an attempt to see how the pieces might fit together. These are some of the ways in which I see schooling changing, along with some of the implications of those changes.*

The purposes and goals of education will be questioned. Schools will ask the questions: What is an educated person? What will our graduates look like and be able to do upon completion of their schooling? Clear statements of expected learning and skills will be written as standards that provide an overall framework within which students will focus their efforts. The distinction between education as preparation of the mind and as preparation for work will lessen as the definitions of an educated person and an effective worker begin to converge. Schools will strive to achieve two goals that have been separate in the past; they will have high standards and will ensure that essentially all students achieve the standards.

By establishing standards for student knowledge and performance and judging students and schools against these standards, much of what happens in schools will be revolutionized. The basic relationship between the student and the teacher will be transformed. Students will know what is expected of them and what they must do to demonstrate they have reached required performance levels. Students will not seek to lower teacher expectations and requirements, since students will be judged against standards that go beyond any one class or teacher; they will not benefit by spending time in a class that does not prepare them to meet standards. Teachers will truly need to be facilitators and coaches. Parents will compare their child's performance to published standards first and other children's standardized-test scores second.

The line between curricular and extracurricular activities will disappear. It will not matter where students learned something, only that they can demonstrate that they meet required performance standards. Parents will be able to take more ownership for their child's learning. A wider variety of learning environments will be employed commonly in most schools, severely challenging traditional instructional methods. Data about how well students meet standards will be easily comparable across schools and much more useful than standardized-achievement tests.

Performance levels above the required standard will allow students to continue to strive and achieve at higher levels than currently represented by an "A." The very existence of standards will allow more conversation about what students ought to know and what schools ought to teach. Curriculum will tend to be updated more regularly. Education will become a more flexible, adaptive process geared more closely to societal priorities and student needs and capabilities.

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* This section is an adaptation of the version that appeared in the first edition of *Roadmap to Restructuring*, which subsequently was adapted for *Are You Ready to Restructure?* It has been additionally modified and updated.

Colleges and universities will adopt performance standards keyed to those required by high schools to create a seamless educational system where students progress based on demonstrated knowledge and skills. By identifying the things students need to know and be able to do, higher education will support an accelerated rate of curriculum redesign in schools. Students will be able to begin college-level studies when they show they are ready. The distinctions among "college prep" courses, "general ed," and "vocational ed" will disappear. Instead, each learning experience will be judged on its ability to prepare students to meet the stated standards necessary for college entrance.

Learners will make more sophisticated choices about what they need to learn. "Credit" will be a measure of what has been learned, not of the amount of time spent in a particular course. Students will be encouraged to take the most challenging learning experiences available to develop skills needed to meet standards, rather than having to guard their grade-point averages by taking easier classes. Higher performances will result in advanced standing in college and college credit.

The curriculum will be updated and adapted to reflect changes in society and in learners. Courses of study will be more integrated so that learners make connections among the different subjects they are taught, and see the purposes and applications for what they are learning. The content that is taught will be scrutinized: Is it relevant, accurate, meaningful? Is there a compelling reason for children to know the material? What role should a textbook occupy in the curriculum? Are facts tools for understanding key concepts, or are they selected and taught arbitrarily? Must the material be organized in a fashion that guarantees fewer students master each succeeding level, or are there ways to move large numbers of students to higher levels of understanding? Can students move at their own pace where appropriate? Is the curriculum composed of things that everyone needs to know to function successfully in society and proceed successfully to higher levels of learning?

The world around the school will become a source for curriculum. Local issues, problems, and resources will be integrated into the curriculum. Students in a mountain community in Colorado will learn about different things than those in a rural school in Indiana, or an urban school in New York. Similar performance standards will be the thread that unites all their learnings.

Real-world problems will be studied more frequently. Students in Oregon may study reforestation plans by analyzing them from geological, biological, ecological, economic, and political points of view. They may then present a report to the U.S. Forest Service and the county board of supervisors. Elementary schools may use the Internet to find help identifying, researching, and posing solutions to a much wider variety of problems than exist in their local community. Kids will be able to make connections among the subjects they are learning, and between what they learn in school and how it applies to the world outside of schools, and to their lives.

The learner will move to the center of the instructional process. Educators will bring this about not by indulging the student, but by thinking of the student as a worker, a client, a partner, and an active participant. This will occur at least in part because it will be increasingly difficult to compel students to learn. Students will be called upon to analyze the things they are learning and to reach their own conclusions more often. Schools will not assume students forget most of what they learn, and will not reteach previously learned material as much.

Learning will require more interaction between and among students, and between the student and a wider range of adults; there will be many opportunities for students to learn from one another. Students will demonstrate what they know publicly, and they will create strong norms of achievement within the school. They will come to support one another's learning and will understand that the only way to succeed is to achieve, not just put in the time. Teachers will be able to use a much wider variety of teaching techniques, particularly those that involve students actively.

Students will construct their own plans for learning. As they mature, they will accept greater amounts of responsibility for selecting learning experiences, organizing their time, and participating as members of a team rather than being directed by a teacher. Their plans will personalize their education, but not individualize it. They will work within a broad framework of possible learning options and will learn, with the help of a wide range of adults, mentors, and peers, to take control of their learning, a skill that will ultimately result in their becoming lifelong learners.

Learning will have value and meaning to the learner. Not all learning will be undertaken to prepare for work, but the connection between education and career will be much clearer. Many more experiences will be available to help students become aware of and explore career options. More students will give serious thought to what they want to become, and they will have opportunities to test out their dreams against the realities of the work world.

Students will learn to think in terms of quality as well as quantity. Worksheets, daily homework, fill-in-the-blank assignments, and other methods that occupy student time but produce low-quality work will be supplemented and replaced by an emphasis on quality. Students will have more opportunities to rework assignments, produce original pieces of work, and create products in which they have pride and ownership. They will come to understand what quality is. This understanding will be reflected in all their work. As a result they will not only make things, but will take more pride in their writing and other more traditional academic work. Teachers will learn how to shape and develop an understanding of quality by assessing work against quality standards and adopting the language and techniques of quality management.

The emphasis will be on success rather than sorting. It will not be acceptable for teachers to say, "I taught it; I've fulfilled my end of the bargain. It's up to them to learn it." Instructional methods will be examined and modified based on their actual success with children. Those techniques that consistently don't work with particular groups of students will not continue to be used with those students. Instructors will acknowledge the needs, capabilities, experiences, and unique challenges and motivations of the learner. This flexibility may lead to a substantial increase, not a decrease, in the amount of content that is taught at any given time to any given group of students.

The school will have many more ways of ensuring student success, and the culture of the school will have a deep and abiding belief that all students can and will learn at high levels. Failure will be considered a joint responsibility and a joint problem to be addressed in a partnership among student, parent, and school. In fact, many mechanisms will be available to help anticipate and head off student failure.

Assessment will be much more common, more public, and more complex. Schools will move beyond testing and evaluation to a wider variety of strategies geared to assess first and judge second. The purposes of assessment will be to provide students and parents the information they need to improve student performance continuously, rather than simply to judge students after they complete a course of study.

Educators will use assessment to analyze larger and larger combinations of skills and abilities together. This will occur because teachers will have curriculum that combines knowledge and skills across disciplines, and that requires higher level thinking from all students. Assessment will compare individual learner performance to clear, challenging standards. Sometimes performance will be accomplished as a team member. Standardized measures that compare students only to one another regardless of overall quality will not be employed nearly as often.

Schools will strive to have all students meet high standards. When they do, it will not be a reason to suspect that the curriculum is not challenging. In fact, consistently high performance will be cause for celebration. Assessment strategies that do not automatically divide students into winners and losers will displace methods such as standardized tests, where by definition no more than half the students are above average, no matter how much they might actually know. Teachers will not have to devise artificial ways of spreading student grades to create a "normal curve."

The ways and places learning occurs will be expanded dramatically. Many familiar ways of organizing students to learn will be modified, replaced, adapted, or enhanced. In both elementary and secondary schools, students may stay with the same teacher or group of teachers for more than one year. Students of varying ages will be taught in the same room. They will learn at their own pace and also serve as tutors for one another. They will move to the next level when their performance meets standards. Traditional forms of ability grouping, in particular, will be replaced by the use of more mixed-ability cooperative-learning groups, cross-age grouping, peer tutors, and other strategies that emphasize success and continuous progress.

The idea that learning only occurs within a classroom under the control of a certified teacher will be replaced by models in which adults and children interact both within and outside the school building. Teachers with certificates will fill crucial roles as organizers, facilitators, diagnosticians, curriculum developers, assessors, and public-relations experts. They will be assisted by highly skilled paraprofessionals, the educational equivalent of Emergency Medical Technicians, who will be skilled at engaging students in learning tasks designed by supervising teachers. Other adults, young and old, will serve as mentors and role models through a much wider range of extracurricular activities.

Business people will visit schools more frequently and open up the work world (private sector, governmental, and nonprofit) to student exploration and participation. Community-based learning, service learning, apprenticeships, and internships will all enrich the educational options available to students. The community will truly be an extension of the school, as students move in and out of the school, community, and workplace depending on the nature of their interests, studies, and the availability of learning experiences.

The boundary between high school and postsecondary learning in community colleges, four-year colleges, and universities will blur. As students show they are ready, learning experiences will be available, sometimes onsite, sometimes via technology, sometimes at a local college or university. More students will enter higher education with a clearer idea of what they wish to study, a better idea of the skills they need to succeed, and a higher probability that they will remain to receive a baccalaureate degree.

Community colleges will link much more closely with high schools through "2+2" programs, where a student begins a course of study in high school that leads directly to two years of advanced training at the community college. Many more "professional-technical" options will be available to students, programs that do not require or lead to a four-year degree, but prepare students for career-type jobs. High schools will do almost no specific job training, ceding this to community colleges or regional cooperative programs between high schools and community colleges. Community colleges will be a key link into local business communities and will offer many opportunities for students to explore the world of work.

There will be many more ways to structure time for learning than in short daily lessons or periods. Many different blocks of time will be created to allow teachers to organize learning in a variety of ways. This will enable more adults to spend time with fewer students. Students will have more opportunities to identify with adults and to make personal connections with the school. By increasing their affiliation with school, they will improve their performance.

The driving force for reorganizing time will be the need for students to meet standards and the need to assess their learning in relation to standards. Schools will have more seminars, workshops, intensive study sessions, labs, discussion groups, tutoring times, and other learning experiences of varying length. There will be periodic "assessment days" when more complicated assessments are conducted. Similarly, there may be "project days," or "field-experience days," or "community-service days," where the entire student body devotes its efforts to a particular task or type of activity.

The length of the school day and school year will be reexamined. Schools will extend their programs—beginning earlier in the day, continuing into the evening, meeting on Saturdays, offering more summer opportunities. However, not all programs available during these times will necessarily be organized and staffed by teachers. Many of these activities will be offered by community agencies and others, including businesses, with interests in education. The times will correspond more to the needs of students and the community. The agricultural-based calendar will gradually be replaced with one geared to an information society.

The time available for learning will vary so that all students who want to can reach desired performance levels. The length of time students spend in school will vary considerably based on their motivation, interests, and learning styles. Since there will be numerous out-of-school learning opportunities, many students will meet required standards by spending most of their time in placements outside the school. Extended-school-year programs will provide more time for teachers to plan and develop new methods and materials, and to organize and supervise a much wider range of learning experiences for students.

While technology will radically redefine the ways information is accessed and transmitted, it will not become a substitute for human interaction. In any emerging vision of education, technology has a transforming role. While its uses are still being explored, its potential is clear. Schools will no longer be the gateways to knowledge. Their libraries will not be the only or even the primary place students go to obtain information. Teachers will need more than the content knowledge they carry in their heads to justify their positions.

Technology will be used to provide basic skills, interface with vast information sources outside the school, enable students to develop their creativity, manage information about student performance and achievement, organize and assist teachers in their quest to serve as instructor and clerk simultaneously, and serve as a tool through which students gain greater control over their own learning. Video will create more ways for students to learn and to demonstrate what they have learned.

More important, technology will create many opportunities for students to work together. Children who use technology in isolation at home will come to school to learn how to function socially and productively while continuing to develop and apply their technological skills.

Schools will become places where interesting questions or problems will be posed. Children will be guided in their exploration of timeless and current questions and issues. Technology will be a primary tool at every step. Computer labs will quickly become outmoded ways of providing students access to technology. There will be less teaching about technology, and more of its use in a transparent fashion, where student and teacher are barely conscious of the fact that they are using technology. Schools will be the place where technology is integrated into the human processes of learning, where it becomes an extension of the learner and the learning community.

Schools will emphasize moral and ethical dilemmas, will help students learn how to work together to solve problems, and will make students aware of how information is accessed, ordered, and used. In short, they will be places where students learn how to transform information into knowledge.

New quality-control measures will be developed to replace the Carnegie unit. The Carnegie unit has played an important role in education for over seventy years. It helped to provide consistent quality standards for the high school curriculum at a time when each school was defining its own standards in radically differing ways. It helped smooth the transition from high school to college and to allow high school students to apply to any college they wished to attend. It also served to standardize the curriculum around common course titles and classes of consistent, predictable length.

While standards and standardization were important in the 1920s, quality measures will become focused on what students know, not how long they study. Technologically based learning, in particular, will create demands for new ways to determine student learning other than how long the student sits in the classroom. "Credits" will be based on identified levels of performance tied to examples of student work. Course titles will not be anywhere near as important as will be the goals of the learning experience and the resultant performance of the students. Students will accumulate "proficiencies" in the way they now count Carnegie units.

School-community partnerships will be increasingly important to the success of every school. Parents will be true partners. They will help develop learning programs for students, participate in the classroom on a more regular basis at all grade levels, make suggestions that assist professional educators, and take responsibility for creating an environment in the home that supports education.

The community at large will also play a new role in schools. Businesses and civic groups, local government, and social-service agencies will all have a vital role to play by offering services; allowing workers to spend more time at school; serving as volunteers and tutors; providing advice, expertise, and resources; helping out at schools with extracurricular events or site beautification; taking on interns, apprentices, and observers; helping teachers develop new skills and knowledge; and generally accepting some responsibility for the education of the community's youth.

All the services needed to help young people develop as healthy human beings will be more coordinated and integrated at the school. Community-service agencies will provide services at the school in close coordination with teachers and administrators. Local government agencies will work more closely together to share resources, coordinate schedules, reduce overlap among agencies that serve youth, and perhaps even build new facilities jointly. More independent contractors and providers will contract with the school to offer services geared to the unique needs of particular students or groups of students. The goal will be to ensure that as many students as possible lead productive, socially responsible lives.

Decision-making will involve greater participation by those with an interest in education. Schools will function more as "town halls" in many important ways. They will be places where communities come together to consider important social, moral, and educational issues. The goals of the school will be discussed more openly, along with its effectiveness. As a result, schools will have stronger relations with the community and will be less subject to external pressure or interest groups.

The role of administrators will be to help schools develop a vision and direction, to orchestrate the change process, to allocate resources in ways that help realize the vision, and to create new opportunities for teacher and community leadership to emerge. These administrators will see themselves not at the pinnacle of a pyramid, but as one point in a network that extends beyond the school itself and includes many people and organizations. Administrators will help direct the flow of energy throughout the network, rather than being the sole source of energy.

Teachers will continue to assume primary responsibility for determining the precise structure and content of the educational program. They will meet more regularly on substantive issues and have fewer meetings where they simply receive information or endorse decisions that have already been made. There will be a wider range of teacher-leadership roles, including lead teachers, curriculum designers, assessment designers, assessment scorers, diagnosticians, staff developers, and community-relations specialists. These teacher leaders will combine their classroom-teaching duties with these specialist functions. Their skills as a teacher will not be lost to the school, but their role will be redefined to allow them to move in and out of their classrooms to provide specialized expertise to their colleagues.

These new teacher roles will stress collegiality and collaboration and will decrease teacher isolation. Teacher leaders will disseminate new ideas more rapidly and help create environments in which all teachers feel supported as they change their practices.

Site councils and other forms of participatory decision-making will ensure regular, meaningful representation and participation by community members, parents, teachers, and students. These councils will not concern themselves with day-to-day issues, but will remain focused on more essential goals. They will gather and analyze information about student performance, ascertain the relevance and utility of the school's curriculum, set goals, suggest areas for teacher training and growth, promote new ideas and programs, and be positive forces for change and adaptation. These councils will be lively and unpredictable, comprising a range of perspectives, beliefs, and personalities. Teachers will listen to and respect recommendations that originate in these councils. Principals will participate as equal voices with a unique responsibility to facilitate the council's success.

Schools will develop a stronger client orientation to cope with more competition. Schools will face challenges from private, charter, alternative, and home schooling. Each of these will be attractive to a particular clientele. Rather than simply continuing to lose 5 percent of students here and 5 percent there to these service providers, schools will make a concerted effort to understand client needs better. They will redesign their programs based on these needs. This challenge will serve to reinvigorate and infuse new ideas into the system. Schools will become more adaptive. This adaptiveness will not be the solution to all educational problems, but will help speed the rate at which schools evolve.

One of the key motivators for these changes will be the realization by schools that each student lost costs the school thousands of dollars in state and local revenue. As budgets continue to tighten, schools will be more motivated to retain as many students as possible, including those whose needs have often been met outside the traditional school structure.

Schools will be subject to and comfortable with a much higher level of public accountability. As many other public and quasi-public agencies are expected to report on their effectiveness, so will schools. Educators will become much more effective in collecting, analyzing, and disseminating data that report on the conditions of education and student progress. These data will serve to inform the public and also to guide ongoing program management and school-improvement efforts. Teachers will consider such data when planning the range of educational experiences they offer to students. Parents will be much more comfortable questioning educators regarding the effectiveness of their school.

Schools will use adults in new and different ways to help students develop and learn successfully. There will be a wider range of paid professionals in schools. In addition to changing the role of teachers, the role of the instructional assistant or aide will be expanded and reconceptualized with an eye toward creating a new category of educator who is truly a paraprofessional, not an aide. These individuals will work with small groups, provide supplementary instruction, and supervise students, thereby allowing the teacher to devote more time and energy to executive-level tasks, such as planning and diagnosing, addressing the needs of particularly difficult or demanding students, communicating with parents, developing curriculum, and conducting and analyzing assessments.

The roles of other specialized personnel, such as counselors and special-education and Title I teachers, will be reexamined to determine how their efforts can best be integrated and coordinated with the work of the classroom teacher. New teachers will be supervised more closely and given more assistance to ensure that every new teacher is excellent. Many more adult volunteers will help supplement the school's staff. Some will be paid hourly to teach a particular class; others will offer supplementary learning experiences that students pay for on a sliding scale.

Traditional relationships between teachers' unions, administrators, and boards of education will become more collaborative to solve problems and improve schools. Labor relations in school districts will still be governed by contracts, but these contracts will be broad frameworks within which individual schools can pursue improvement. Wages and benefits will be the key elements of these contracts, but educational practices will be left to schools to a much greater degree. Waivers will be granted to individual schools when needed, and more problems will be addressed outside the contract and away from the bargaining table. While teachers' unions will continue to be important, they will begin to function more as partners and operate more as professional associations than trade unions. Mechanisms such as joint committees of teachers, administrators, and board members will explore solutions to problems as they arise rather than allowing everything to build up to negotiations. Collaborative-bargaining strategies will seek to build trust among all participants.

Rarely, if ever, will all the elements in this vision be present in any one school or district. Most ongoing attempts to redesign schooling will only be able to include a subset of these elements. Taken as a whole, the general description I offer here provides a picture in broad brush strokes of the ways in which many educators, policy-makers, and others who write about schooling are thinking about how education might transform itself.

This vision suggests ways that education can help the entire community and the economic system. It reflects the increased emphasis on each student as an individual. It assumes teachers will have more content knowledge, more teaching techniques, heightened professionalism, greater sophistication, and enhanced leadership skills. The vision acknowledges the need for new partnerships to emerge for education to succeed in a complex, global information society. And it suggests fundamental overhaul of curriculum, instruction, and assessment as the starting point and continuing focal point of all educational change.

ARE THE VISIONS BEING IMPLEMENTED?

To what degree are these visions being actualized or implemented by educators? Preliminary evidence suggests that few schools have moved very far down the restructuring path on a broad scale, though many have developed programs or initiated projects. Lee and Smith (1992) found in a study of restructuring in 377 selected middle schools that fewer than 1 percent of the schools exhibited 13 or more of the 16 characteristics of restructuring identified by the researchers. The largest proportion of schools, 44.6 percent, had one to five restructuring characteristics. Having considered the Lee and Smith study and a study by Berends (1992), Prager (1992) concluded:

> This information indicates that, in spite of plentiful rhetoric and extensive initiatives by districts, states, and national organizations, the restructuring movement has yet to touch the mass of American schools in any significant way. Even in the most selective sample, less than half of those restructured schools are pursuing major elements of restructuring. In the larger sample, elements of restructuring are pursued much less frequently. In considering initiatives in the future, policymakers may want to consider why so few schools seem to have changed significantly in response to all the initiatives thus far. (p. 5)

It would be naive to suggest that educational restructuring will be easy to achieve, or even that it is a foregone conclusion, given the difficulty of fundamental change in education. Schools face great challenges simply confronting the existing images of education that are embedded within them. Barbara Benham Tye (1987) describes the paradoxical nature of American schooling: A decentralized national system of education with extensive local control results in schools that look remarkably similar, yet function in vastly different ways. Tye (1987) summarizes John Goodlad's Study of Schooling*, in which she participated:

> Walk into a public high school in any of the 50 states, and you are likely to find yourself in familiar territory. You will not be surprised by the physical

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* See Goodlad (1984), B. Tye (1985), K. Tye (1985). Goodlad's findings have also been reported in numerous articles and technical reports.

> uniformity of classrooms; the overall control orientation of policy, program, and pedagogy; the general similarity of curriculum and of schedule; the reliance on test scores as measures of "success"; and the practice of tracking. I have come to think of these common characteristics of schooling as its "deep structure."
>
> Yet each school I studied as a part of the Goodlad team was also different from the others in dozens of big and little ways. The cumulative effect of these differences gave each school its particular "personality." Each of the 13 high schools was shaped by its own history, by the nature of the community of which it was a part, and by such internal factors as the quality of teacher/administrator relationships, the number and intensity of school problems, and the climate of most of its classrooms.
>
> This juxtaposition of concepts—the deep structure of schooling and the distinct personality of schools—can be used heuristically to think about the problems of change and resistance to change in our educational system. (p. 281)

By virtue of local control and decentralized decision-making, schools have the potential to adapt themselves to the needs of their local communities and student populations. Educators seem to operate, however, under self-imposed limitations regarding how they might best organize themselves to meet their clients' needs. Most tend to look backward and sideways, not forward, when seeking ideas and solutions. The challenge is for schools to be able to evolve by employing solutions from outside the routine and the familiar. Elmore (1991) examines the tendency of schools to adhere to a set of solutions to organizational problems that have become set in stone. He uses the analogy of the DNA molecule to suggest how ingrained and unquestioned certain thought-and-behavior patterns are:

> Certain solutions—the age-grade structure, the allocation of single teachers to classroom units, the allocation of specific content to specific periods of time, etc.—have become "fixed" in the institutional structure of schools. They have become fixed, not necessarily because we know they "work," in some educational sense, although that may be true, but because they help us manage the organizational demands of mass education. For the most part, we adhere to these regularities of schooling because we have seemingly always adhered to them and they have come to be identified in the minds of students, teachers, and parents with what it means to "do school."
>
> One way to think about these regularities of schooling is as a sort of genetic code for the organization of schools. The basic problems form a sort of template, just as the basic structure of the DNA molecule forms a template for the transmission of human characteristics. The particular set of solutions to these problems that we develop in a given school is like a genetic code for schooling, or the specific make-up of an individual DNA molecule....

> ... [T]he central problem of so-called "school restructuring" is how to make the genetic code of schools—the specific solutions to the problems posed by the regularities of schooling—more compatible with emerging conceptions of teaching and learning. (pp. 12-14)

The transformation, or restructuring, of public education in America is a task of Herculean proportions. Most schools have not acknowledged that there is a gap between their current organizational structure and instructional practices and the needs of society and of students. Given this apparent lack of any sense of urgency to change, it is difficult to discern how schools will transform themselves on the scale implied by restructuring. Education continues to receive mixed messages from policy-makers and community members regarding its legitimate role and goals. It is perhaps unfair, unreasonable, and unrealistic to ask educators to transform themselves in the absence of clear mandates and adequate support to do so. Very few examples can be found of organizations that change radically without some sort of external force or threat, generally combined with a clearly articulated internal mission and vision. Systems-level change is difficult and painful for most adults; educators are no exception.

In addition, the restructuring process itself is fraught with contradictions. The following section outlines some of the most important contradictions inherent in the educational-restructuring process. Understanding these contradictions helps explain why precious few schools have been able to make significant headway in systemic-change efforts.

CONTRADICTIONS OF RESTRUCTURING

One of the reasons schools may have a difficult time responding to calls for fundamental change is that there are many contradictions present within the current pressures to restructure education. The following paragraphs identify and briefly discuss these contradictions. While not all these apparent contradictions may turn out to constrain restructuring, they represent a series of issues that must be confronted and resolved for the change process to move forward in many schools. They also challenge policy-makers, who need to take into account these contradictions when they develop and enact new rules and procedures that they expect schools to follow.

CONSTRUCTIVISM VS. STANDARDS

Constructivist notions put control of learning in the hands of learners, who are invited to participate in the creation of their own personal interpretations and meaning of material. A standards-based system expects all learners to demonstrate proficiency in certain agreed-upon areas. This contradiction becomes more apparent as children move from primary schools, where developmentally appropriate practice focuses on the learner quite naturally, to secondary educational environments, where expectations for mastery of subject matter are clearly defined.

These two forces can be reconciled, but doing so will require thoughtful systems design and a commitment to allowing students to demonstrate proficiency in a wide variety of ways. It will also require integration and definition of the purposes at the elementary, middle, and secondary levels of schooling.

NEW VISIONS OF EDUCATION VS. PROJECT PROLIFERATION

Through their attempts to develop new, comprehensive visions of education, educators are struggling to escape from the current paradigms and assumptions surrounding schooling. At the same time, however, they often initiate numerous projects that may be inconsistent or only loosely linked to their emerging vision. The result is that restructuring becomes defined as a particular project (a new schedule or curriculum or grouping strategy), rather than as a broader vision for learning within which many different projects or approaches may proliferate.

Allowing a number of projects to be developed simultaneously may be necessary in some cases to move the vision of the whole school along. Even the most frenetic attempts to jump start a vision via project development may fail, however. Many members of the school community (especially parents, students, and most teachers) may not perceive how the various pieces of the vision embodied in the projects fit together to form a new vision of education, nor how they may contribute to such a vision.

FOCUS ON ADULTS VS. FOCUS ON THE CHILD

Restructuring activities seem to divide into those that focus on the needs of adults versus those that focus on the needs of the child. This may seem an unfair distinction, and yet many of the new governance models being attempted that consume so much time and energy seem to relate only tangentially to the needs of children. This is not to say that such changes cannot or will not eventually benefit children. In the beginning at least, they are not focused primarily on the needs of children in most cases. Alternatively, many other activities or suggested changes connect directly with the evolving needs of children. It will be important to try to identify the places where the needs of adults and those of children overlap, or to create means to enhance such overlap, so that the results of restructuring are seen to benefit both.

INCREASED PROFESSIONALISM VS. INCREASED COMMUNITY INVOLVEMENT

The skill level and responsibilities of teachers will be expected to increase radically if many of the changes in curriculum, instruction, assessment, learning environment, and teacher leadership come to pass. Teachers will have much more responsibility to design curriculum, utilize a range of instructional techniques, assess student performance to provide feedback and reach important judgments, and employ a variety of grouping strategies. These responsibilities imply a higher level of professionalism among teachers. One of the key behaviors that defines a professional is the ability (and right) to apply a body of professional knowledge to solve problems and make decisions.

The growth in teachers' professionalism may conflict with a countertrend of involving parents and the community to a greater degree in the governance of schools. Community members may feel they need to prescribe educational practice or set goals in ways that conflict with or overlap this increased professional latitude of teachers. As with other contradictions discussed previously, this is not automatically a problem if the roles of each are specified carefully and accepted by all, but the potential for misunderstanding seems great.

STABLE/DECLINING RESOURCE BASE VS. RADICALLY INCREASED EXPECTATIONS FOR STUDENT ACHIEVEMENT

The decade of the nineties is one where society has come to look upon schools as key in the struggle for economic competitiveness. Expectations that all students must reach a high level of intellectual functioning for their own economic well-being and the good of society have become more widespread and pervasive. Schools are seen as the only opportunity for many to develop the new, higher skill levels necessary to participate in the work force. These ever-increasing expectations and demands for a highly educated citizenry are being promoted in the same forums where the need for fiscal frugality is also being urged. Often it is the same people who are demanding both simultaneously.

Satisfying higher expectations under these conditions is a new challenge for public schools, which are accustomed to addressing problems only when additional resources are provided to do so. This contradiction may prove to be profoundly troubling to educators, particularly principals and teachers, the "front-line" workers, who will find it difficult or impossible to conceive of how to address problems in the absence of significant infusions of new resources. This trend will only be exacerbated as control over school funding continues its migration from the local to the state level. Schools will not be able to appeal to their local communities to finance programs of improvement. The ability to think "outside of the box," to conceptualize new ways to organize or reallocate resources, is likely to be an important skill for the decade.

EMPOWERMENT VS. ACCOUNTABILITY

Two of the significant trends of school reform, decentralized decision-making and increased demands for accountability, appear to be on a collision course. In many states and districts, schools have become empowered to make more decisions locally through school-site councils or other vehicles. At the same time, national and state trends reflect a continuing desire to hold schools more accountable for performance. It will not be impossible to devise accountability systems that provide wide latitude for local decisions, but it will be difficult; it will require thoughtfulness, attention to details, and abandonment of the notion that there is one right way by which to measure or judge school success. Policy-makers do not have a very good track record of attending to such subtleties.

Local councils are unlikely to prosper or survive if they cannot make decisions that have substantial impact. However, will they be willing to take responsibility in proportion to the authority they receive? What will happen when a school fails to improve? Will the council or the principal be held accountable? This relationship between site-level decision-making and system-level accountability promises to provide a source of tension for some time to come.

BUREAUCRACY VS. COMMUNITY

Most schools currently resemble bureaucratic organizations rather than communities. In fact, much of the legislation and many of the policies that have been put in place during the past seventy-five years have been for the purpose of building bureaucratic safeguards into schools, to remove them from the political arena. These safeguards have worked well, for the most part, to provide schools some insulation from their immediate communities.

Schools are now being challenged to function as true communities for students (and parents) who may have no real sense of community in their lives. They are asked to function as islands, or havens, within neighborhoods, rich and poor, that have few of the characteristics of true communities. Schools are expected to create environments where everyone shares some level of belief in and commitment to a vision of education that is focused on validating and developing each child as a valued individual, on creating opportunities for individuals to affiliate with the school as a community, and on enhancing the self-image and self-esteem of all members of that community.

A natural tension exists between the aspiration toward community and the rules and regulations designed to ensure protection for those who occupy roles within the system. Bureaucracies demand that all members follow the rules and procedures of the organization; they have difficulty creating a sense of community and belonging for all. This inherent tension between rule-based organizations that provide guarantees and protections for the adults and communities that meet the unique needs of their members may prove difficult to resolve.

NATIONAL/STATE/BUSINESS CONSTITUENCY FOR RESTRUCTURING VS. NO LOCAL CONSTITUENCY

The call for radical restructuring of schools can be found in magazines, on television, in national reports, at state and national legislative hearings, in corporate board rooms, and at meetings of business leaders and policy-makers. It is almost a given among these groups that the only way to revive public education is through massive, perhaps traumatic, change. Somehow the message does not seem to have been received, or perhaps believed, at the local level. While there is increasing evidence that more community members and parents are vaguely uneasy about the quality of education in their schools and that some sort of change is needed, this feeling has not crystallized into large-scale demand for educational restructuring. In the average classroom, there is even less of a sense of urgency for change.

This contradiction between highly visible activity at state and national levels and little active connection to the local level is analogous to a storm on a lake, where the winds whip the surface waters into waves and whitecaps, but all remains calm several feet beneath the surface. If you are a passenger in a boat, your perspective on events is fundamentally different than if you are a fish in the water. Grassroots consensus for change in social institutions takes a long time to develop. Consequently, the coexistence of intense action at policy levels and little action at local levels may be a necessary phase from which emerges agreement on new goals and methods for education.

OLD MODELS FROM THE PRIVATE SECTOR VS. NEW MODELS FROM THE PRIVATE SECTOR

Many private-sector organizations that operate under the principles and techniques of scientific management, or Taylorism, are seeking to abandon them rapidly and replace them with management philosophies and practices based on worker involvement, commitment to quality, and maximum organizational flexibility and adaptability. Schools were strongly encouraged (or compelled) to adopt scientific management shortly after the turn of the century, when such practices were in vogue in the private sector.

Educators find themselves in a similar situation again. They are being asked to abandon the old practices of the private sector and to adopt the new practices of the private sector. Strategic planning and Total Quality Management are only two recent examples of this trend. The challenge for educators is to determine which practices from the private sector are in actuality techniques that have application to all organizations, and then to adapt and modify these techniques to the specific needs and unique structures of educational institutions.

WHAT LIES AHEAD?

Whether educators have the energy or interest needed to initiate and sustain restructuring remains to be seen. At present, policy-makers and the business community are continuing to press for substantive change and improvement in public education. If those outside education lose interest in educational change, this may be an ominous sign, for it may indicate that they have given up on public education as a key to economic and social survival. If policy-makers and key community leaders come to believe that the public education system is beyond repair, it will become increasingly difficult to obtain the resources, support, and involvement needed to reshape the school system.

The question may not be whether public education will change. It may be whether educators will remain in control of the process, and whether public education will continue to retain its legitimacy as the institution best equipped and positioned to socialize and educate the vast majority of young people. With this legitimacy comes the right to an exclusive claim on tax dollars. If educators are to change in the ways necessary for earnest, radical, and successful restructuring, it may be necessary for them, and especially teachers, to adopt a systems perspective so that they can perceive their behaviors in a broader social-policy context.

Ultimately restructuring comes down to the behaviors of individual teachers and principals in particular educational settings. The success of restructuring depends on their willingness, along with the willingness of administrators, boards of education, state educational agencies, legislatures, the federal government, and especially community members, parents, and students, to accept changes in the "deep structure" of schooling and in the goals of public education. The act of listing all these constituencies starkly outlines the magnitude of the challenge. The reactions and behaviors of these constituencies over the next several years will determine the probable future of the emerging visions of educational restructuring presented here.

This book has attempted to outline a roadmap of restructuring. A roadmap presents possibilities, not inevitabilities. There are many ways to get "there" from "here." Public education may be at a crossroads, and the choices made or not made, the routes traveled or not traveled, in the next several years are likely to generate repercussions that will be felt for some time to come. It is my hope that educators and others interested in the future of public education study this roadmap carefully so that they can be assured that they have made a conscious decision of the road they wish to follow and the destination toward which they are headed.

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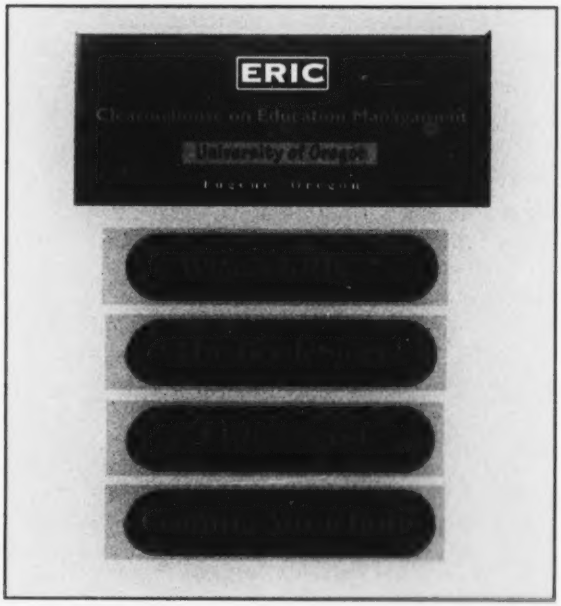
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Bruce A. Miller • 1994 • 8 1/2 x 11 inches • xii + 123 pages • perfect (sew/wrap) bind • ISBN: 0-86552-130-1 • $15.95 **Code: EMOCAC.**

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Meredith D. "Mark" Gall, Roseanne O'Brien Vojtek • 1994 • x + 54 pages • 6 x 9 • saddle bind • ISBN: 0-86552-126-3 • $6.95. **Code: EMOPFE.**

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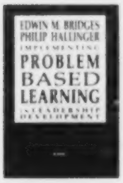

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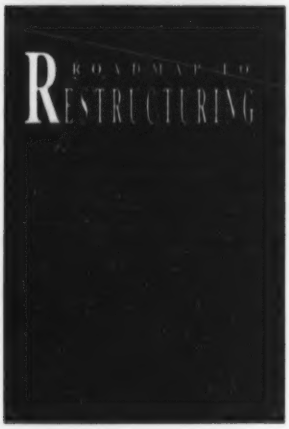

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